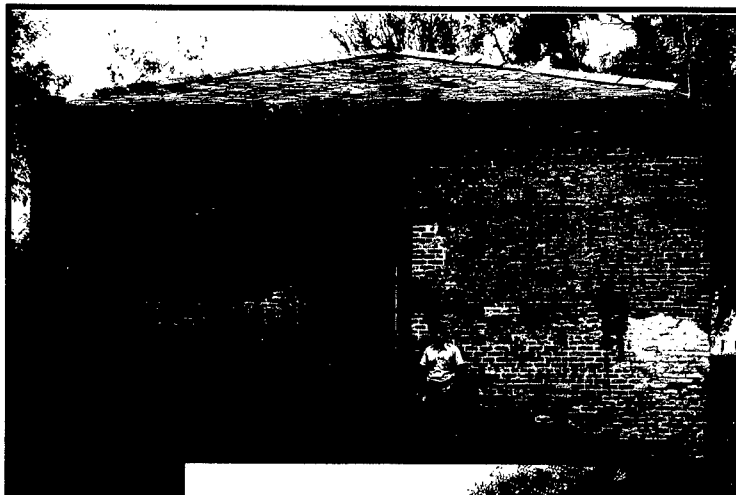


The Powder Magazine: Historical Documentation and Architectural Maintenance, Powder Magazine Park, R.E. "Bob" Woodruff Lake, Montgomery, Alabama

Contract No. DACA01-97-D-0002
Delivery Order 31



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13. ABSTRACT (Maximum 200 words) Brockington and Associates, Inc., conducted historical research and administered architectural maintenance of the Powder Magazine in Montgomery, Alabama, between April and September 1999. The Powder Magazine is located in Powder Magazine Park, overlooking R.E. "Bob" Woodruff Lake (also known as Jones Bluff Lake), formerly the Alabama River. This work was conducted under an indefinite delivery order contract with the US Army Corps of Engineers, Mobile District (USACE). Investigations and maintenance work were conducted in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 (NHPA, as amended), and implementing regulations of the USACE (33 CFR Part 325, Appendix C: <i>Procedures for the Protection of Historic Properties</i>). The Alabama State Historic Preservation Office(SHPO)/Alabama Historical Commission (AHC) concurred with the level of effort for building maintenance on June 8 th , 1999. This project provided historical and architectural documentation of the building and repaired/restored deteriorating structural elements. Maintenance activities followed The Secretary of Interior's <i>Standards and Guidelines for Architectural and Engineering Documentation</i> , Historic American Building Survey (HABS) and Historic American Engineering Resources (HAER) standards, <i>Rehabilitating Historic Buildings</i> , and relevant <i>Preservation Briefs</i> . Maintenance tasks included correcting on-going structural deterioration (from excessive moisture) by removing concrete and brick pavers around the building, grading to re-establish positive drainage, repointing and repairing exterior brickwork, rust treating interior iron supports, and floor cleaning. Management recommendations for periodic inspections and additional maintenance and restoration are also provided.				
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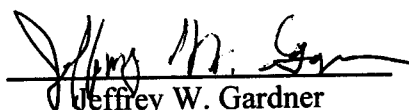
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Prepared for the

US Army Corps of Engineers, Mobile District
Mobile, Alabama

Submitted by


Jeffrey W. Gardner
Project Manager and Author

Brockington and Associates, Inc.
Atlanta Charleston Raleigh
1999

Management Summary

Brockington and Associates, Inc., conducted historical research and administered architectural maintenance of the Powder Magazine in Montgomery, Alabama, between April and September 1999. The Powder Magazine is located in Powder Magazine Park, overlooking R.E. "Bob" Woodruff Lake (also known as Jones Bluff Lake), formerly the Alabama River. This work was conducted under an indefinite delivery order contract with the US Army Corps of Engineers, Mobile District (USACE). Investigations and maintenance work were conducted in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 (NHPA, as amended), and implementing regulations of the USACE (33 CFR Part 325, Appendix C: *Procedures for the Protection of Historic Properties*). The Alabama State Historic Preservation Office (SHPO)/Alabama Historical Commission (AHC) concurred with the level of effort for building maintenance on June 8th, 1999.

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Acknowledgments

The author sincerely appreciates the efforts of numerous individuals and groups contributing to the successful completion of this project. The project was funded by the US Army Corps of Engineers, Mobile District (USACE). The Technical Project Manager was Ernie Seckinger, Mobile District Archeologist. It is unlikely that we would have conducted this work without Ernie's long term interest and continuing enthusiasm for the preservation of the Powder Magazine.

Building maintenance and preservation strategies were discussed on-site on February 10th, 1999. Participants at this meeting were: Ernie Seckinger, Edward "Ike" Lyon, and John Bennett (USACE); Kim Harden, Ed Hooker, and Camile Bowman (Alabama Historical Commission [AHC]); Durand Seay and Tim Vaught (Architecture by Acanthus); and Bobby Southerlin (Brockington and Associates, Inc.). AHC staff members and USACE personnel provided essential advise on technical and practical issues and offered personal support to the maintenance efforts.

Several individuals were extremely helpful during the author's historical research in Montgomery. Historian Mary A. Neeley (Landmarks Foundation of Montgomery, Inc.) allowed access to her files and provided valuable research guidance. Ed Bridges (Director, Alabama Department of Archives and History) volunteered his time and staff to documenting a construction date for the Powder Magazine. Kim Harden (Preservation Architect, AHC) directed the author through the AHC files on the Powder Magazine. John Bennett (USACE Ranger, Alabama River Lakes) and Ike Lyon (USACE Park Manager, Alabama River Lakes) provided extensive Corps records for Powder Magazine Park development and maintenance. The assistance of Connie Peterson (Montgomery County Probate Records and Recording, Courthouse Annex) was invaluable in accessing and interpreting property records. Finally, Dr. Ed Bridges (Director, Alabama Department of Archives and History) and a member of his staff, Norwood Kerr (Archival Reference) provided key references supporting Civil War era construction of the Powder Magazine.

Brockington and Associates, Inc., (Contracting Project Manager) directed and monitored all subcontractor work, conducted historical documentation of the Powder Magazine, and produced this report. The subcontractor for architectural evaluation and documentation was Durand D. Seay (with assistance from Tim Vaught) of Architecture by Acanthus (Montgomery, Alabama). The demolition and maintenance subcontractor was Charles R. Bullock through his firm, U.S. Commercial Contracting, Inc., (Eutaw, Alabama). Ron Hobgood and John O'Donnell assisted the author in treating metal structural elements and removing debris from the building floor. David Diener produced several of the report graphics, and Sharon Egan and Tracy Lee assisted in final report production.

We would be extremely remiss if we did not recognize the numerous historic preservation professionals, government and business people, and interested citizens who have played various roles in long term efforts to preserve the Powder Magazine. James L. Loeb (Landmarks Foundation of Montgomery, Inc.) and Milo B. Howard (late Alabama State Historic Preservation Officer [SHPO]) were instrumental in recognizing the importance of the Powder Magazine, in nominating the building for listing on the National Register of Historic Places, and in spearheading initial restoration efforts. Land acquisition and development of Powder Magazine Park by the USACE was assisted by former Montgomery Mayor Jim Robinson, and State Representative James D. Harris Jr. (Montgomery). USACE staff involved in park development and early restoration efforts include Colonel Drake Wilson (District Engineer), Robert Creswell (Resource Manager), Melvin W. Dovith (Chief of Real Estate Division), Lawrence Green (Chief of Planning Division), and James A. Dees (Construction Division). Jim Stanfield (USACE, Natural Resources Planner) was a driving force for Powder Magazine preservation. Most notably, Jerry Nielsen (former Mobile District archeologist) consulted with historic preservation professionals and provided necessary guidance in preservation and restoration efforts through periodic inspections. Carey B. Oakley (Office of Archaeological Research, University of Alabama) documented the pre-restoration condition of the Powder Magazine in his 1977 report, *Cultural Resources Inventory of the Jones Bluff Lake, Alabama River, Alabama*.

Individuals and groups played various roles in the previous restoration of the Powder Magazine. Nicholas Holmes, Jr., (architect) and Carl Kling (USACE) participated in architectural consultations. Tiller Butner Rosa & Seay (Architects-Engineers, Montgomery) produced architectural and structural drawings for the 1978-80 restoration of the Powder Magazine, under a contract with Landmarks Foundation of Montgomery, Inc. Henry H. Pope (USACE) supervised site work, and Jerry Abernathy and Robert S. Hurley (Maxwell Air Force Base, Resident Office) provided logistical support. Powder Magazine restoration was completed by Columbus Building & Supply Company (Columbus, Mississippi).

USACE personnel conducted annual inspections of the Powder Magazine and its associated park after federal acquisition of the property in 1975. Architectural inspections, begun in the 1980s by Ernie Seckinger, Jerry Nielsen (USACE archaeologists), Charles Moorehead (USACE Historian), and Billy R. Thomas, Sr. (USACE architect), documented on-going building deterioration and recommended immediate repair and stabilization. McDonald Brooms (formerly with the Alabama SHPO's office) and Elizabeth Brown (Architect, now Deputy SHPO) provided technical recommendation and assistance which resulted in replacement of the roof in 1991; this work completed by Standard Roofing of Montgomery, Inc. Recommendations for architectural evaluation and development of a rehabilitation plan for the Powder Magazine were included in the *Historic Properties Management Plan for R.E. "Bob" Woodruff Lake* (1993). The author offers his sincere

appreciation for the persistent and continuing efforts of USACE personnel leading to the current work and to future restoration and interpretation.

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Chapter 1. Introduction and Methods

Project Introduction

Brockington and Associates, Inc., conducted historical research and administered architectural maintenance of the Powder Magazine (Figure 1) in Montgomery, Alabama, between April and September 1999. We completed this work under an indefinite delivery order contract with the US Army Corps of Engineers, Mobile District (USACE). The Powder Magazine is located on USACE project lands, on the bluffs of the Alabama River (now R.E. "Bob" Woodruff Lake) between Maxwell Air Force Base and downtown Montgomery, Alabama (Figure 2). The Powder Magazine has been listed on the National Register of Historic Places (NRHP) since 1973 and was assigned Alabama archaeological site number 1MT33 in 1977 (Oakley and Watson 1977).

The Powder Magazine is a substantial structure, measuring 39 feet long (east-west) by 29 feet 2 inches wide (north-south). Its two-foot-thick brick walls are composed of inner and outer shells, separated with an air cavity. The walls have a decorative corbel at the eave line and are vented to the inside and outside by off-set four-inch square blast vents. The roof is slate, with molded concrete ridge tiles. The walls are supported by four pairs of iron tie rods spanning the building (north-south). Each pair of tie rods meets near the center of the building at integral interlocked hooks. The floor is brick, and there is a rectangular pit (6 ft 8 in wide, 13 ft long, 2 ft 2 in deep), reportedly for interior drainage, in the southeast corner of the building. The triple-barrel vaulted brick ceiling is supported by four brick columns, spanned by two iron beams.

The USACE purchased the Powder Magazine and surrounding tracts from the City of Montgomery in 1975, then leased it to the city for use as a public park. Previous attempts by the USACE to clean, rehabilitate, and stabilize this building began in the late 1970s. The current project focused on providing documentation (historical and architectural) of the building, and correcting ongoing structural deterioration by removing concrete and brick pavers around the building, grading to re-establish positive drainage, repointing and repairing exterior brickwork, and treating interior iron supports. In addition, we installed wire mesh in building openings (except for the doorway) to prevent future pest infiltration. Under Sections 106 and 110 of the National Historic Preservation Act of 1966 (NHPA, as amended), and implementing regulations (33 CFR Part 325, Appendix C: *Procedures for the Protection of Historic Properties*), the USACE is responsible for preserving, restoring, and maintaining historic properties under their jurisdiction. The Alabama State Historic Preservation Office (SHPO)/Alabama Historical Commission (AHC) approved the level of effort for building maintenance on June 8, 1999 (USACE, Mobile 1999).

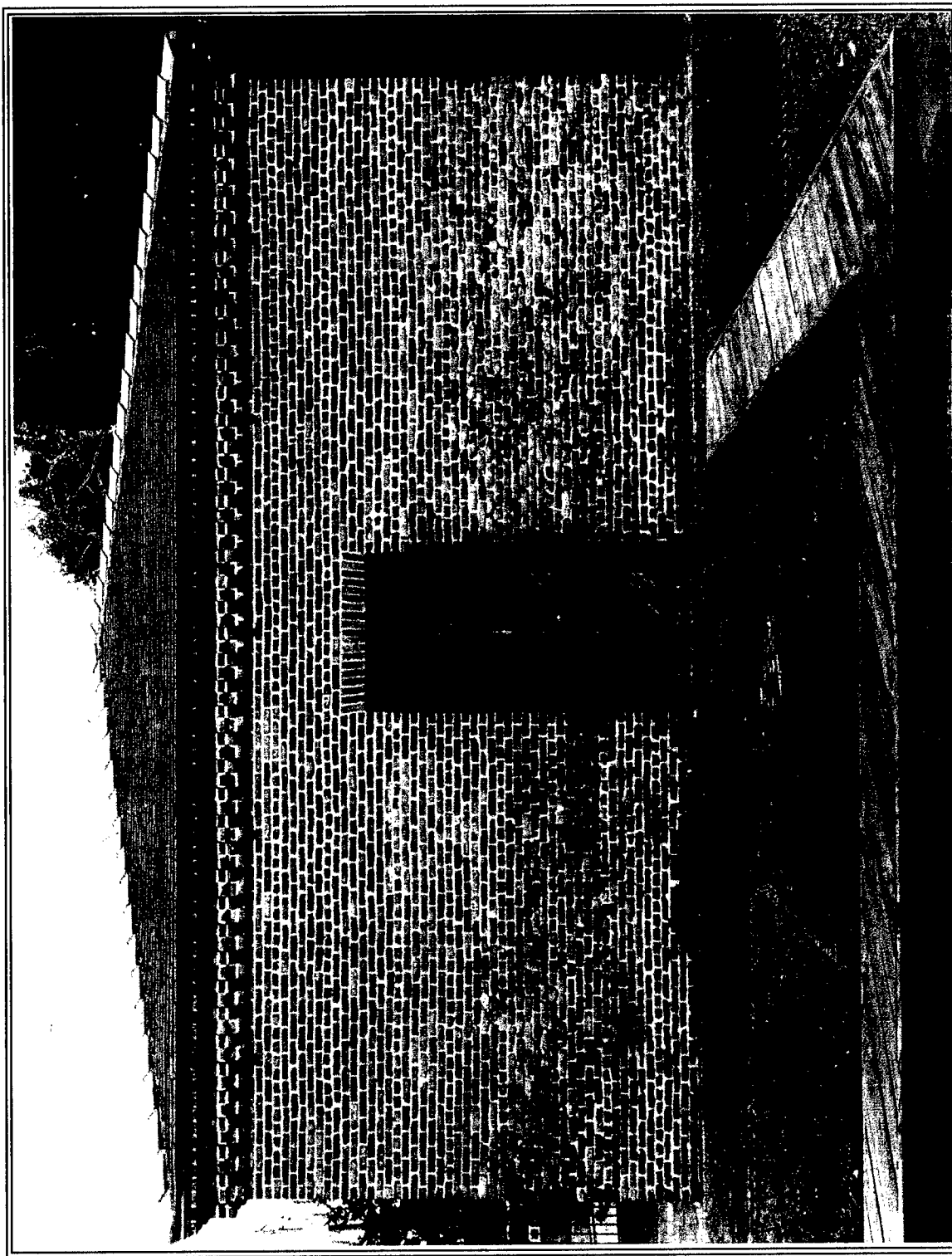


Figure 1. East side (front) of Powder Magazine, May 1999.

Brockington and Associates, Inc., directed and monitored subcontractor architectural documentation and repair work and conducted historical documentation of the Powder Magazine. The author conducted the historical research. The subcontractor for architectural evaluation and documentation was Architecture by Acanthus (Montgomery, Alabama) and the demolition and maintenance subcontractor was U.S. Commercial Contracting, Inc., (Eutaw, Alabama).

Historical Documentation Methods

Background historical research was conducted by Brockington and Associates, Inc., at relevant federal, state, and local archival repositories. This research focused on determining the Powder Magazine's construction date, the builder, its construction purpose, its past use, and its past owners. We conducted research at the USACE (Mobile and Alabama River Lakes Offices), the Alabama Department of Archives and History (ADAH; Montgomery), the Alabama Historical Commission (AHC; Montgomery), the Alabama State Site (and report) Files at the University of Alabama (Office of Archaeological Services [OAS], Moundville), the Montgomery County Courthouse (Probate Records and Recording), and the Landmarks Foundation of Montgomery, Inc., (LFM). In addition, we contacted and interviewed knowledgeable local informants. We also reviewed all previous cultural resources work, including maintenance and restoration activities.

Architectural Documentation

Durand Seay and Tim Vaught of Architecture by Acanthus (Montgomery, Alabama), produced measured drawings and documentation photographs of the Powder Magazine prior to current building maintenance. Drawings include a floor plan, exterior building elevations (north, south, east, and west), an interior section elevation, and both pre-demolition and proposed post-demolition site plans (Appendix A). Seay also produced a series of photographs documenting exterior elevations and architectural details, and interior conditions. We scanned these photographs and reproduced them for Appendix B. We will submit original drawings and photographs to the USACE in the project curation package.

Architectural documentation also included photographic documentation of the maintenance process. The author was present during most phases of this work and took 35 mm photographs (slide format) of various stages. The author also recorded many of these activities on Hi-8 mm videotape. We will submit this videotape, and one converted to VHS format, to the USACE for curation.

Architectural Maintenance

USACE representatives, AHC staff, Brockington and Associates, Inc., and the architectural subcontractor (Architecture by Acanthus) discussed proposed maintenance tasks during an on-site meeting at the Powder Magazine on February 10th, 1999. Our defined maintenance activities followed the Secretary of Interior's *Standards and Guidelines for Architectural and Engineering Documentation* (HABS/HAER Standards), *Rehabilitating Historic Buildings*, and relevant National Park Service *Preservation Briefs*. We addressed the following primary tasks:

1. Correcting the exterior and interior moisture defects at the site to remove the rising damp from the structure;
2. Repointing exterior brickwork and repairing significant brick damage;
3. Providing and installing screens to control access to the structure by birds and other animals (including the blast vent holes and the main door);
4. Repairing the slate roof and its drainage, as needed;
5. Assessing and stabilizing interior iron beams and tension rods;
6. Removing dirt and brick/mortar dust from the building floor; and
7. Providing an updated Alabama state architectural site form.

The subcontractors conducted no mechanical activities (i.e., removal of paving materials with a jackhammer, heavy machinery excavation and grading) on-site without documented coordination with the Technical Project Manager, Ernie Seckinger (USACE, Mobile).

Demolition

The first phase of architectural maintenance was demolition and removal of the brick sidewalk and terrace surrounding the Powder Magazine. The paving material was placed around the building in 1978-1980 during development of Powder Magazine Park. The architectural subcontractor, in consultation with the USACE Technical Project Manager and AHC staff, determined that the brick paving and its associated concrete and fill substrate should be removed as a first step in correcting excessive exterior and interior moisture conditions. Previous site evaluations determined that this paved surface was accelerating ongoing deterioration of the brick structure. The natural site drainage was modified when this surface and underlaying fill were added. Soil moisture was retained around the building, and moved upward in the walls through capillary action. In addition, the impervious brick and mortar surface adjacent to the building resulted in repeated rainwater splashback. These processes combined to cause mortar and brick deterioration on the exterior of the building, and may have contributed to the breakdown of brick and mortar on interior surfaces. In some

cases, particularly noted on the north (exterior) side of the building, brick spalling has occurred. This spalling may have resulted from freezing of retained water.

Paving material to be removed included the terrace surrounding the Powder Magazine on three sides and sections of sidewalk to the southeast and the northwest of the building. A wooden bench attached to the terrace on the east side of the building was also removed, but a brick planter adjacent to the terrace (southeast of the building) was retained. Prior to demolition, the demolition and maintenance subcontractor verified utility locations and took steps to eliminate all foreseeable hazards to people and property. The subcontractor and the Contracting Project Manager limited site access to project personnel.

Initially, the subcontractor was to cut and remove terrace bricks within a five-foot circumference around the building using hand tools to reduce potential equipment damage to the existing structure. Attempts by the demolition subcontractor to remove these materials by hand proved unsatisfactory (i.e., too time-consuming) due to the rocklike consistency of the mortar. The subcontractor brought a jackhammer to the site, following discussions between the USACE Technical Project Manager and the on-site Contracting Project Manager (the author). Jackhammer work was closely monitored to avoid damage to the building. The equipment was always angled away from the brick walls to avoid excessive lateral pressure, and possible structure vibration was closely monitored. When brick pavers and mortar immediately adjacent to the building were removed, a four to six inch gap separating the paving from the building was observed (Figure 3). This gap also minimized potential mechanical vibration damage.

Removal of the brick pavers revealed an underlaying bed of reinforced concrete, six to eight inches thick. Removal of this material required additional mechanical assistance. After concrete within two feet of the building had been broken by the jackhammer and shoveled away, the demolition subcontractor used a backhoe to break up and remove larger slabs (Figure 4). Technicians loaded all debris, including brick and mortar, concrete, and reinforcing metal, into rented dumpsters and the dumpsters were removed from the site (Figure 5).

Removal of the brick and concrete paving revealed a former brick step at the entrance to the Powder Magazine (Figure 6). Previous restorers had poured the concrete directly over this step, and rebar had been driven through a portion of the brickwork. Mechanical removal of the concrete severely damaged this feature; however, after careful examination of the debris and the intact portion of the step, we determined that it was not original to the building. The step was made of a variety of bricks, both old (handmade) and relatively new (extruded), and exhibited several different types of mortar (Figure 7). To date, we have found no documentation for the original step, or for a previous restoration. Although the building almost assuredly had a step at its entrance originally, it appears that a previous restorer or building occupant rebuilt this feature, possibly between the 1930s and



Figure 3. Photo of the Powder Magazine (north side) during brick terrace removal, looking southeast.



Figure 4. Photo of the Powder Magazine (front/east side) during concrete slab removal, looking south.

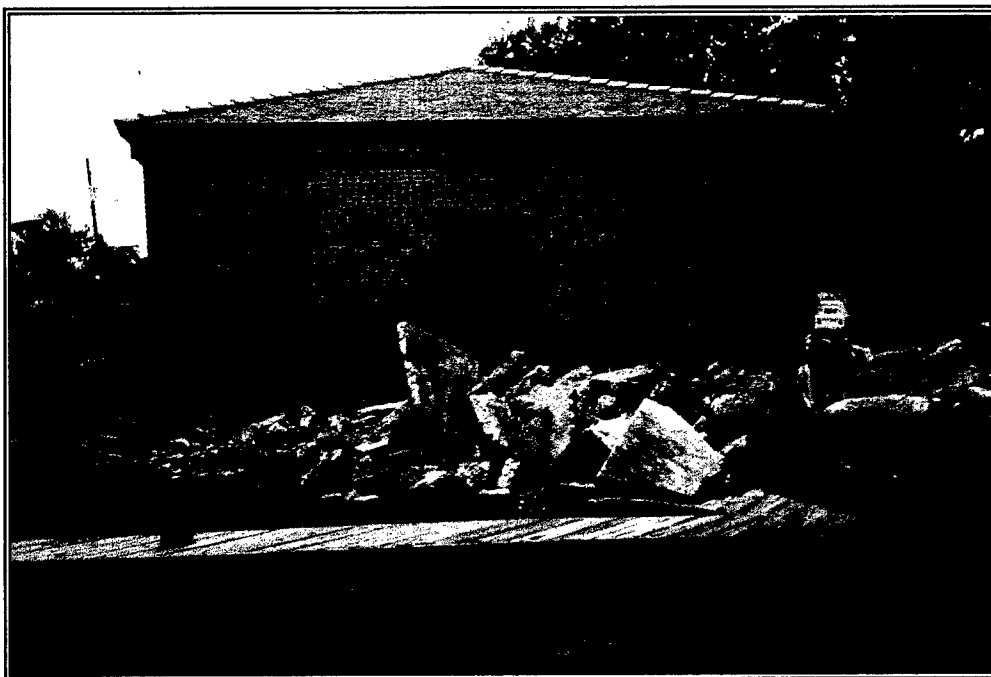


Figure 5. Photo of front (east side) of the Powder Magazine during brick and concrete debris removal, looking west.



Figure 6. Photo of exposed remains of brick step, before cleaning.



Figure 7. Photo of exposed remains of brick step, after cleaning.

the 1970s. The step was certainly rebuilt before the 1978-80 USACE restoration of the Powder Magazine (see Appendix C and Figure 30, Chapter 2), as it is unlikely that these restorers would have reconstructed the step at that time, only to cover it with concrete. After documentation, we dismantled the remains of the step (due to safety concerns) and placed old bricks in the building for possible later reconstruction. The brick masons used several of these old bricks for structural repairs.

Drainage Improvements

Initial plans for drainage improvements at the Powder Magazine called for trench excavation around the Powder Magazine, installation of a French drain system, and connection of this drain with the curb inlet for the storm sewer on Eugene Street. To effectively implement this plan, a site contour map was completed by Southern Survey & Design (Montgomery), at the request of the architectural subcontractor (Figure 8). Based on previous observations and these survey data, we determined that the original scope of work for improving drainage on the Powder Magazine site was not feasible. The top of the nearest curb inlet (south of the Powder Magazine) is approximately level with the finished floor of

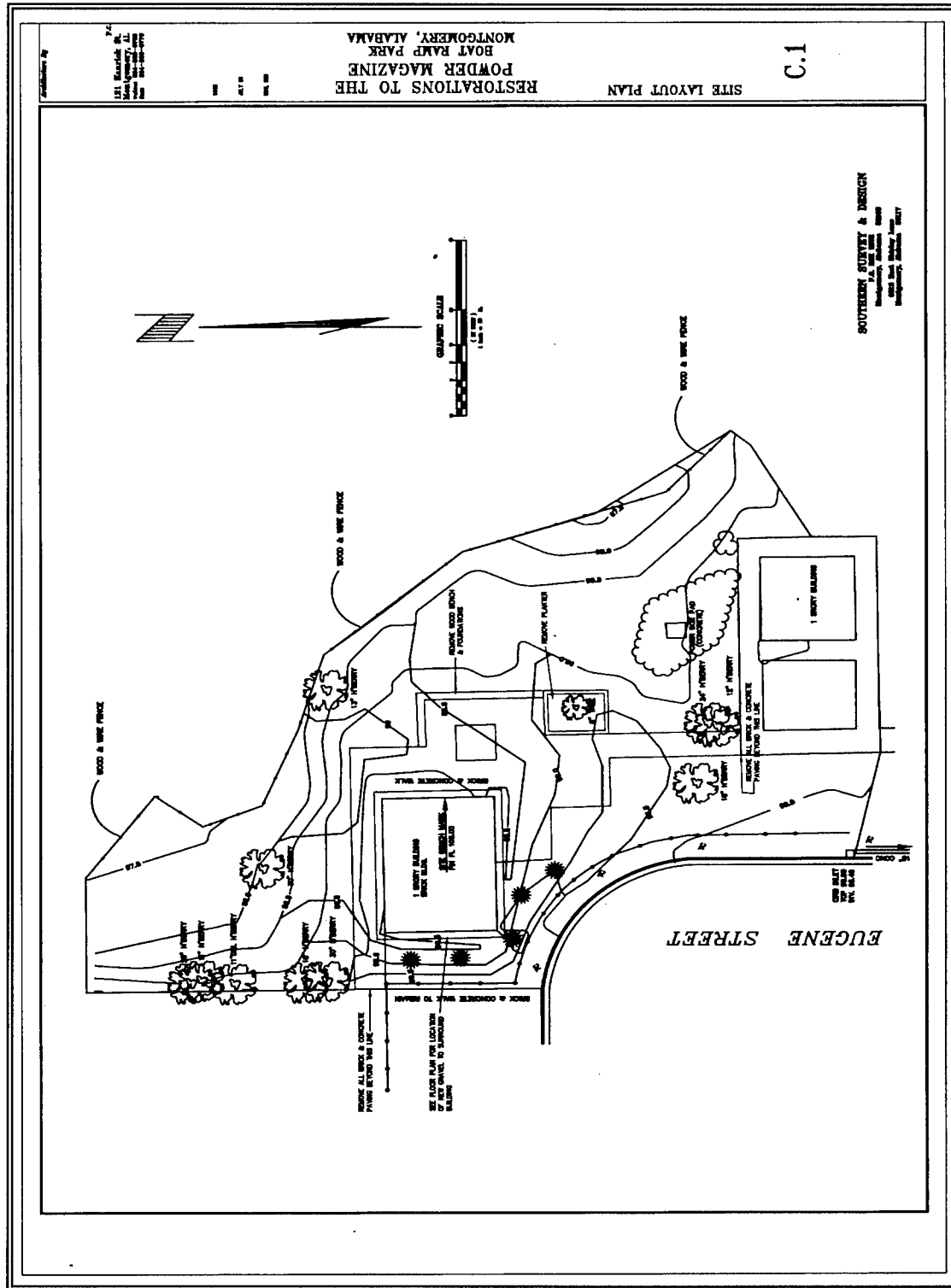


Figure 8. Contour map of area surrounding the Powder Magazine.

the building (Figure 9). More importantly, the base of this curb inlet is approximately 24 inches below the finished floor of the Powder Magazine. In order to provide adequate drainage from the building into this inlet using a French drain (installed no more than 8 inches below the present grade), additional fill would have been required to retain the pre-demolition site grade and to provide adequate soil cover for the French drain. This installation would have provided a slope of only one percent. Addition of fill would have negated benefits of pavement removal, increased current moisture problems, and been detrimental to long term building maintenance.

Our revised recommendations focused on improving natural site drainage. To accomplish this goal required hand excavation and heavy equipment to:

1. Lower the finish grade around the building to between 16 and 20 inches below the finish floor; this approximates the pre-1980 grade, prior to addition of brick paving;
2. Grade the site, beginning with the lowered grade (see 1 above) at the southwest corner of the building, providing a 2.5 to 3 percent slope (approximately 1 foot: 20 feet) away from the building to the north and east;
3. Place approximately 4 inches of river gravel in an eight-foot wide band around the building, bounded by a plastic edging strip; and
4. Place a four inch layer of sand and St. Augustine sod (best in partial sun-partial shade) over finish grade.

We determined the original (pre-1978-80 restoration) grade by excavating archaeological test units and examining a pre-restoration photograph. We excavated a 1 by 1 meter test unit along the rear (west) exterior wall of the building. We removed approximately 2 feet of fill prior to encountering the three-course stepped foundation bricks (Figure 10). We verified this fill depth in an informal unit excavated in the planting bed at the front (east side) of the building, and determined that as many as ten brick courses had been buried with fill material and paved with concrete and brick.

Site grading and landscaping immediately followed terrace demolition and debris removal. A backhoe was used to cut and fill the site to the proper grade. Technicians monitored grading to provide accurate drainage contouring. Immediately following site grading, river gravel was delivered and distributed around the building in the manner describe above (Figure 11). The subcontractor hand raked the gravel to a smooth, consistent thickness, sloping gradually away for the building with the underlying ground surface. After the gravel border had been established, the surrounding area was tilled and smoothed

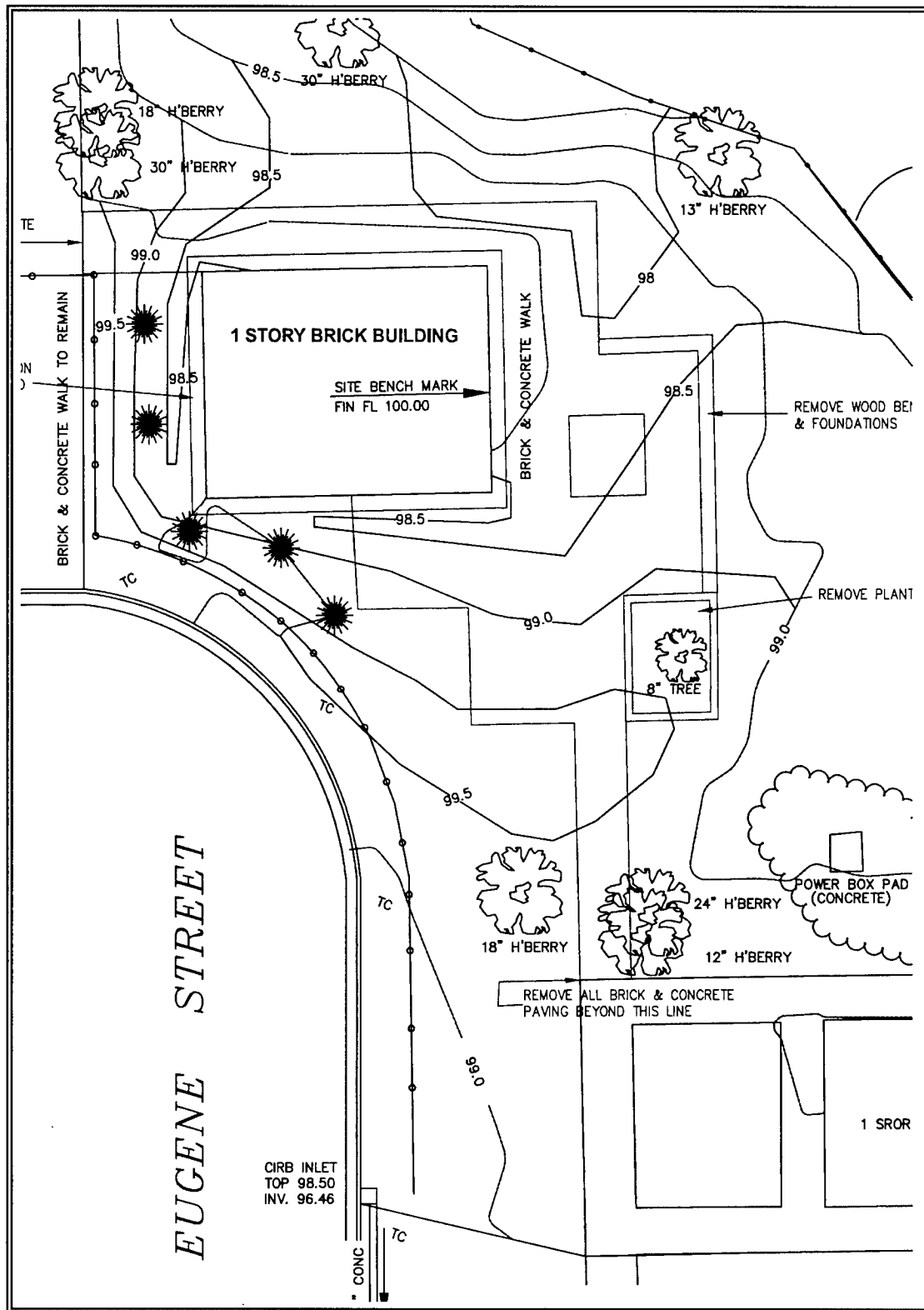


Figure 9. Enlargement of contour map section.



Figure 10. Photo of east profile of test unit, showing buried wall and foundation section.

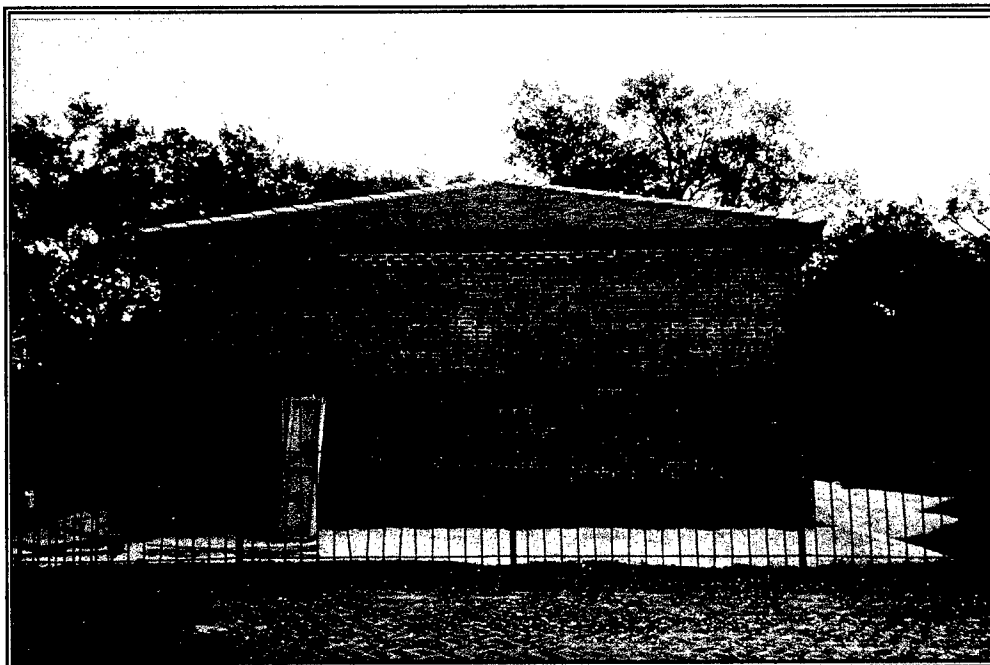


Figure 11. Photo of rear (west side) of the Powder Magazine, looking east, showing mounded gravel.

Figure 12). St. Augustine turf was delivered and installed (Figure 13). The turf was watered generously after placement and periodically thereafter, approximately equivalent to 1 inch minimum of absorbed water per week. The demolition and maintenance subcontractor provided a one year turf guarantee, beginning on the date of the final inspection.

We made a significant discovery during site grading at the front (east) side of the building. The backhoe operator exposed a large, roughly rectangular piece of extremely rusted iron. The iron artifact measures approximately 2 feet wide by 8 feet long (Figure 14) and was determined to be an original door for the Powder Magazine. We carefully excavated the door, removed excess dirt, and transported it to the Brockington and Associates, Inc. laboratory in Atlanta for detailed documentation. We carefully cleaned the door and our Graphic Artist photographed it (Figure 15) and produced a measured drawing (Figure 16). The door was in extremely poor condition; following SHPO and USACE consultation, the door was discarded.

Masonry Restoration

The primary task of masonry restoration on the Powder Magazine was repointing of mortar joints. Excessive moisture conditions, exacerbated by insect and bird activity, had caused mortar deterioration, particularly on the lower 6 to 8 feet of the building exterior (Figures 17 and 18; also see Figure 1). Repointing and brick repair followed guidelines in the revised *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings* (Mack and Speweik 1998). Only qualified and experienced personnel were used during the mortar and brick restoration work. New mortar was mixed to match the original mortar as closely as possible in color, texture, strength, and hardness (i.e., density and porosity). The new mortar has the same or less strength, and the same or less hardness, than the original mortar. Masons accomplished color matching through the use of aggregates matching the original aggregate color.

Prior to repointing, masons cleaned exterior building surfaces using stiff nylon brushes and water under normal pressure. After scrubbing, the walls were thoroughly rinsed with cold water to remove all residual dirt. Cleaning started at the top of the building and progressed downward. Openings in the masonry (e.g., blast vent holes, doorway) were protected during washing.

The building required minimal brick repair work. However, removal of the brick terrace revealed previous settling damage to the northeast corner of the building. Mortar was missing, several bricks were cracked, and some had fallen out of place. Masons repaired this corner by first removing broken bricks, remnant mortar, and dirt. Whole bricks were salvaged from the damaged corner and from the building step previously dismantled. New mortar was applied and bricks were laid in the original pattern.

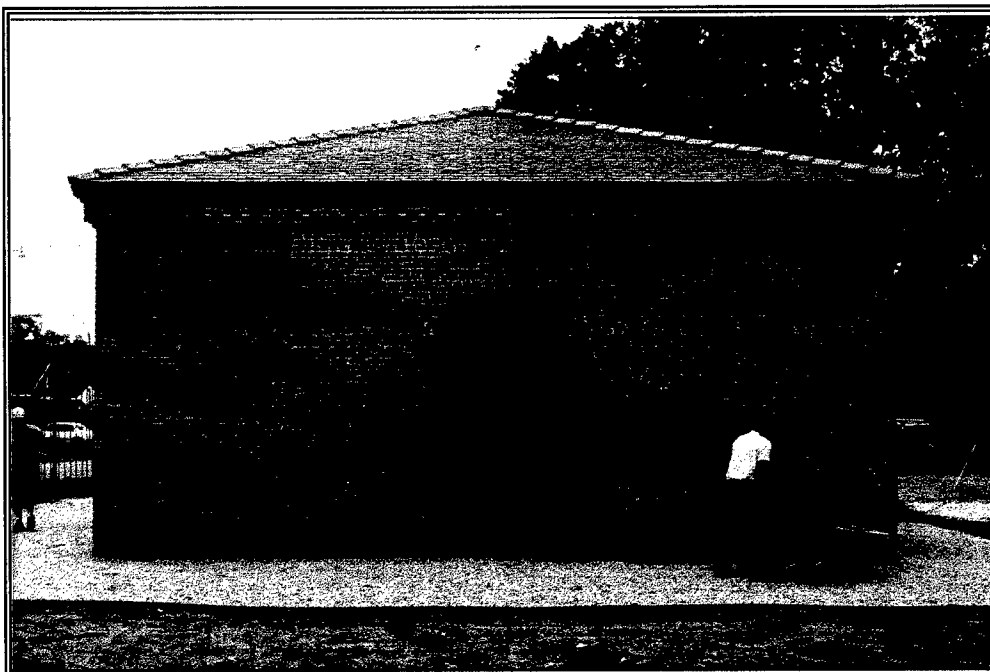


Figure 12. Photo of front (east side) of the Powder Magazine, after gravel was smoothed and prior to sodding.

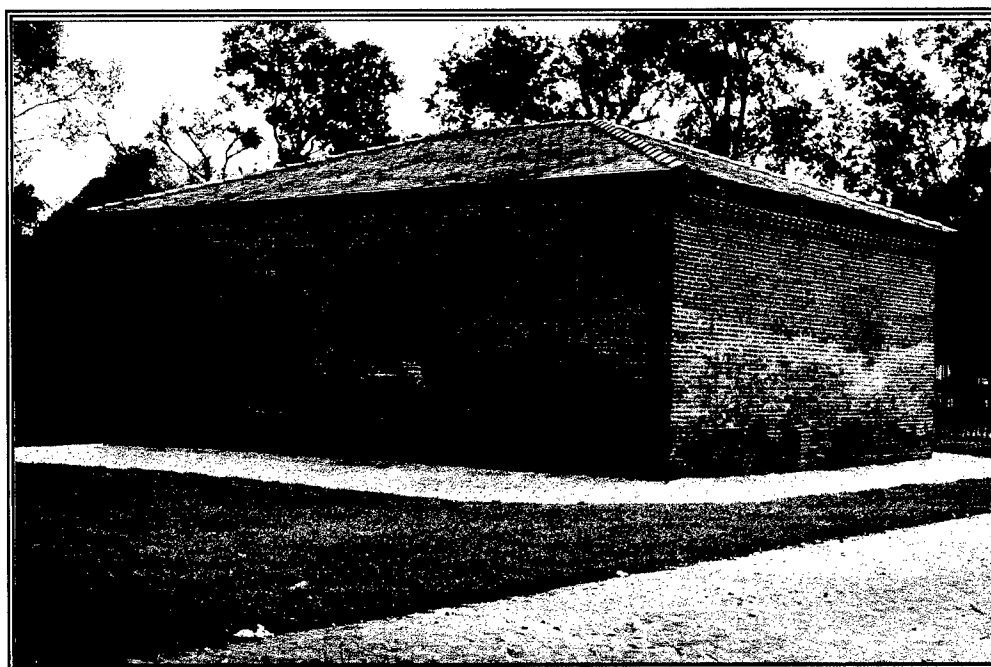


Figure 13. Northwest oblique photo of the Powder Magazine after sodding.



Figure 14. Photo of exposed iron door, looking east.

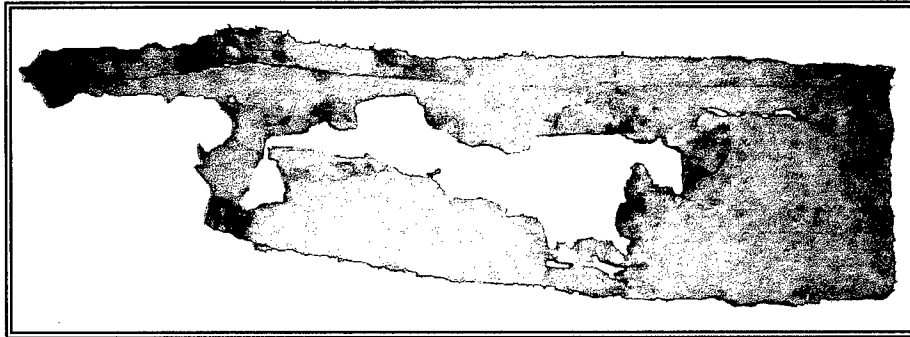


Figure 15. Photo of iron door in lab.

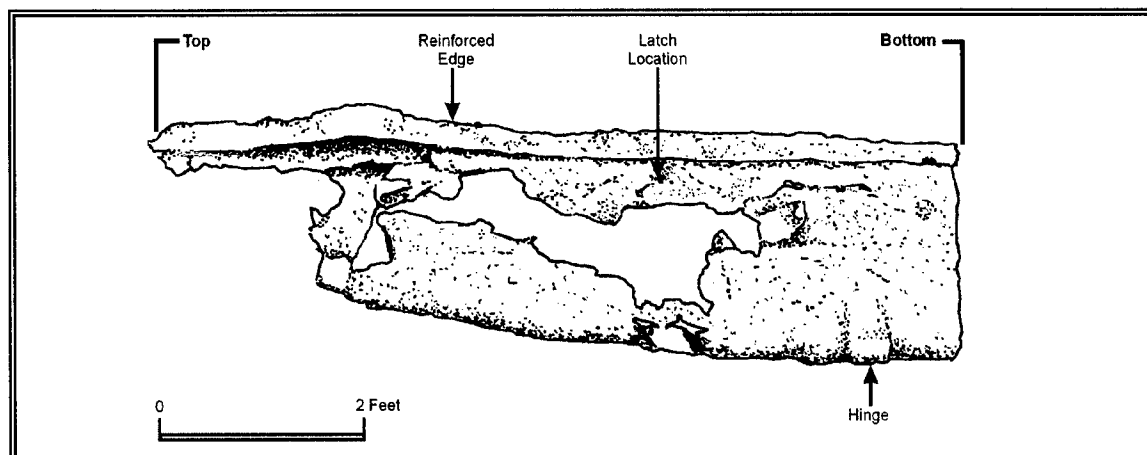


Figure 16. Measured condition drawing of iron door.



Figure 17. Photo of southwest corner of Powder Magazine, looking northwest, showing extent of eroded mortar.

During repointing, care was taken to replicate existing mortar joints and to avoid additional damage to bricks. Masons removed eroding and defective mortar to a minimum depth of 3/4 inch, using hand tools, to clear out loose mortar. After careful cleaning, the joints were wet thoroughly and fresh, prehydrated mortar was applied. Water was allowed to soak into the joints and the joints were not visibly wet with standing water during the repointing. Mortar joints were filled in layers less than or equal to 1/4 inch thick, and each layer was applied with pressure as soon as the previous layer had partially dried (Figure 19). The first and intermediate layers were left rough to help bond subsequent layers. The final packing was compressed as much as practicable. Excess mortar was removed with a stiff bristle brush. Masons tooled mortar joints with a flat metal jointer, and the finished joint was very slightly recessed from the face of the brickwork.

At the completion of the work, all exposed exterior masonry surfaces were thoroughly cleaned of excess mortar and foreign matter using stiff nylon brushes and clean water under normal pressure. Brick repointing work was periodically inspected by the architectural subcontractor and the Contracting Project Manager. Final inspection was conducted by the architectural subcontractor (Figure 20).



Figure 18. Photo of exterior brick, showing eroded mortar and spalled brick.

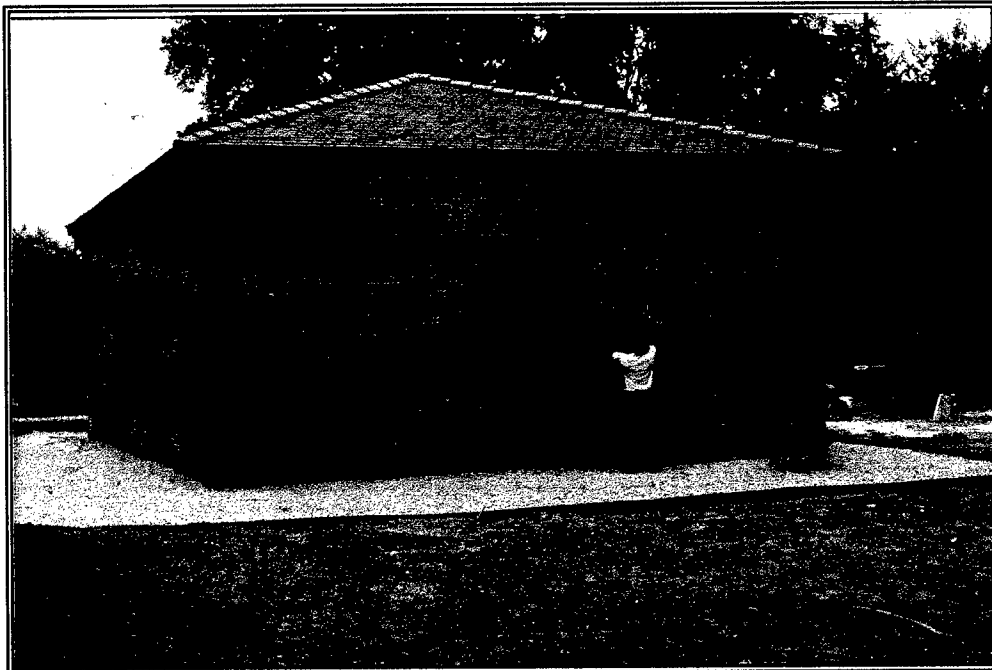


Figure 19. Photo of mason repointing front (east side) of the Powder Magazine, looking west.

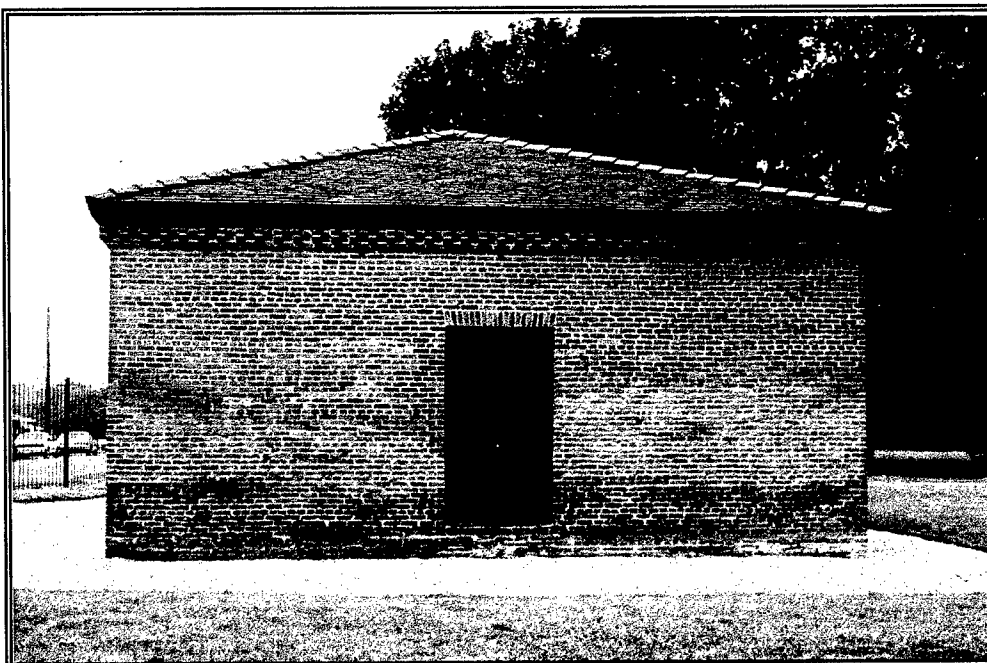


Figure 20. Photo of front (east side) of the Powder Magazine, immediately after repointing.

Roofing Slate Replacement

The final exterior architectural maintenance task was replacement of broken or dislodged roofing slates. Repair followed guidelines in the revised *Preservation Brief 29: The Repair, Replacement, and Maintenance of Historic Slate Roofs* (Levine 1992). Slates matching existing roofing material were ordered early in the project and delivered to the site in late August. The subcontractor first removed damaged slates by cutting or pulling out copper nails with a ripper. Care was taken to avoid damage to adjacent slates. When the damaged slate did not slide out by itself, the pointed end of a hammer was punched into the slate and the slate was dragged out.

New slates (or salvaged slates) were matched to size, shape, texture, and weathered color of the old slate. New slates were then slid into place and held into position by one copper nail inserted through the vertical joint between the slates in the course above (approximately one inch below the tail of the slate two courses above). To prevent water penetration through the newly created nail hole, a piece of copper with a friction fit, measuring approximately three inches wide by eight inches long, was slid lengthwise under the joint between the two slates (located directly above the new slate and over the nail). No roofing mastic or sealants were used.

Metal Stabilization

The first of two interior maintenance tasks was protective treatment of interior iron structural supports and the sheet metal threshold. Structural elements include: four iron plates (one topping each brick column); two iron beams spanning the columns and attached to the walls (east-west); and four pairs of iron tie rods spanning the building (north-south). Each pair of tie rods meets near the center of the building at integral interlocked hooks (Figure 21). These elements had previously been painted, but rust had caused the paint to blister and peel. The sheet metal threshold was worn and badly rusted (Figure 22).

Protective treatment of metal architectural elements consisted of cleaning and application of a polymeric rust converter (brand name - CONQUEST™). Conquest contains a blend of rust converting agents, viscosity modifiers, leveling agents, and coalescing agents in a stable polymer emulsion. Application on ferrous metal converts the rust to a stable substance and the protective coating inhibits additional oxidation. Use of this product requires a relatively clean surface, free of oil, dirt, and loose (scale or powdery) rust, but cleaning to bare metal is not recommended.

Prior to treatment, technicians spread eight mill polyethylene plastic sheeting to protect the brick floor from drips. Technicians wore respirators and gloves to avoid inhalation of fumes and contact with the chemical.

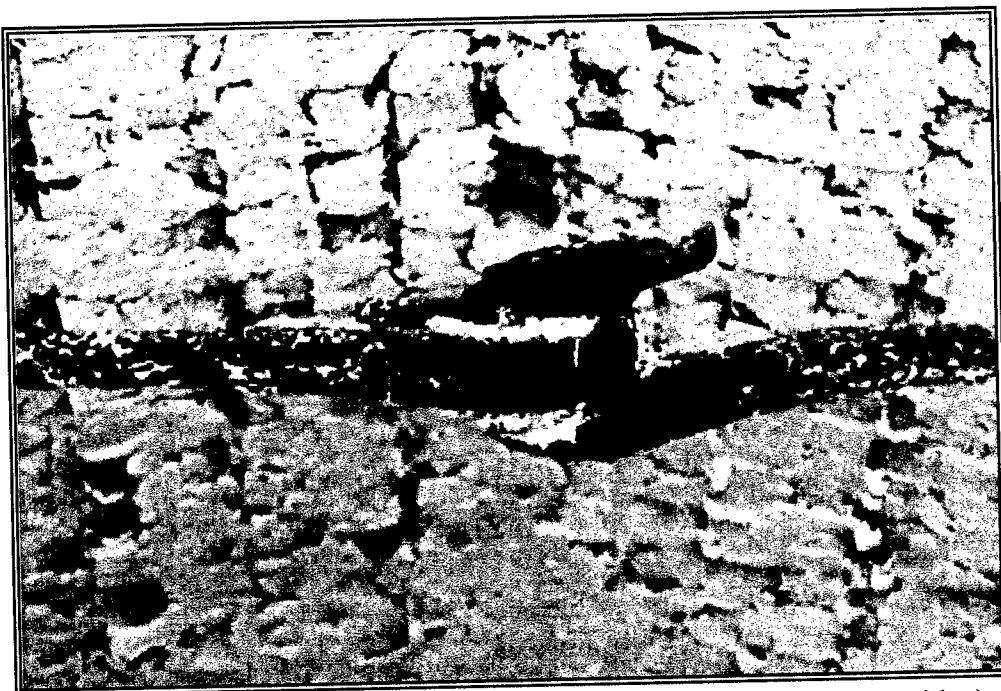


Figure 21. Photo of tie rod before metal treatment (captured from video).

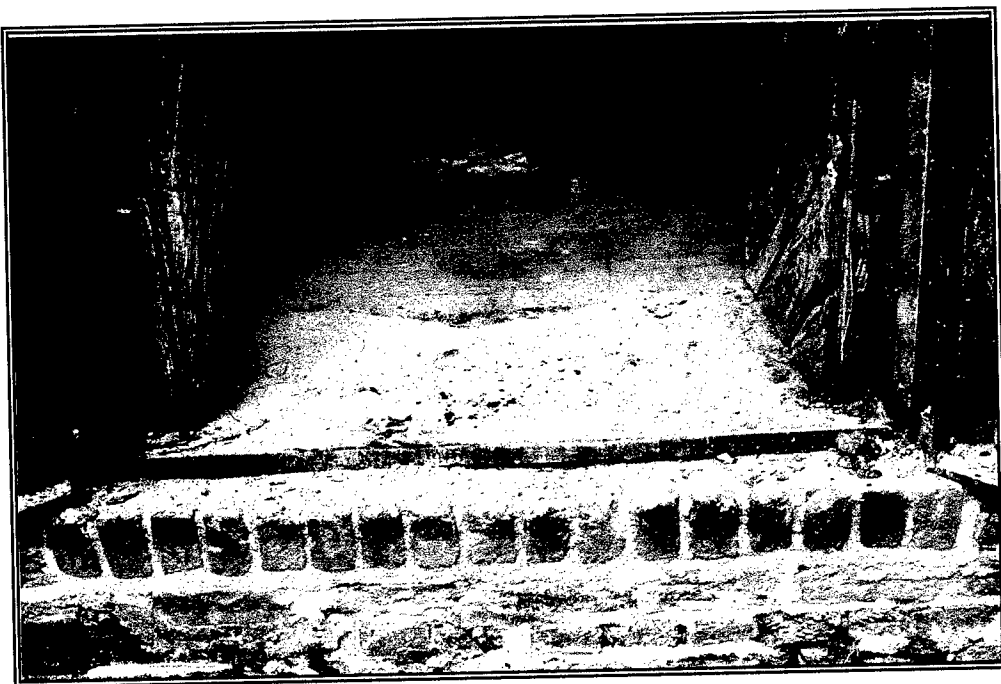


Figure 22. Photo of threshold before treatment.

Metal surfaces were carefully brushed with a wire brush to remove dirt, paint, and loose rust. Final cleaning with a dry nylon brush removed remaining dirt and rust dust. The wire brush was not used to clean the sheet metal threshold. Conquest was carefully applied with a brush. All exposed surfaces were coated liberally and allowed to dry for 15 to 30 minutes to a tack-free surface. During the rust conversion process, the metal surface turns bluish gray. Technicians used extreme caution to avoid all contact with surrounding brick surfaces. A second coat was applied immediately to maintain a continuous chemical conversion. The final surface has a uniform, semi-glossy black appearance (Figures 23 and 24).

Floor Cleaning

As indicated in previous evaluations/inspections of the Powder Magazine (see Chapter 2), quantities of brick dust, mortar, and dirt had accumulated on the brick floor. In some areas adjacent to the walls, this material was as much as three inches deep. Removal of floor debris addressed two maintenance needs: (1) accumulated debris held moisture and its removal contributed to the overall plan to remove excess moisture from the building; and (2) removal of dirt and debris during the current maintenance efforts provides baseline data for monitoring continued structural (i.e., brick and mortar) deterioration. Floor debris was removed using a straw broom and an industrial wet/dry vacuum, powered by a gasoline generator (provided by the Montgomery Department of Parks and Recreation). Care was taken to avoid scratching or scraping the brick floor. Technicians also attempted to remove accumulated fill spilling from the blast/air vents at floor level. After excess debris at the base of the vent had been swept away, the vacuum hose was carefully inserted into the vent opening to remove debris, clearing the opening for ventilation. No attempts were made to insert the vacuum hose into the void between the inner and outer walls, as remaining mortar between bricks could be dislodged, possibly compromising structural integrity.

Covering Vents

The final task of building maintenance was installation of screen wire in the blast vent holes. The blast vent holes measure approximately 4 by 4 inches and are present in both the exterior and interior walls (see illustrations in Appendices A-C). On the building exterior, these holes are located in a single horizontal row of five immediately below the corbeled brick on the east (front) wall, in two rows of five (immediately below the corbeled brick and midway down the wall) on the west (rear) wall, in a single row of five midway down the wall on the north wall, and in two rows of five (midway down the wall and approximately 2 ft below the corbeled bricks) on the south wall. On the interior, the blast vent holes are distributed in two rows: approximately six inches above the floor; and even with the top of

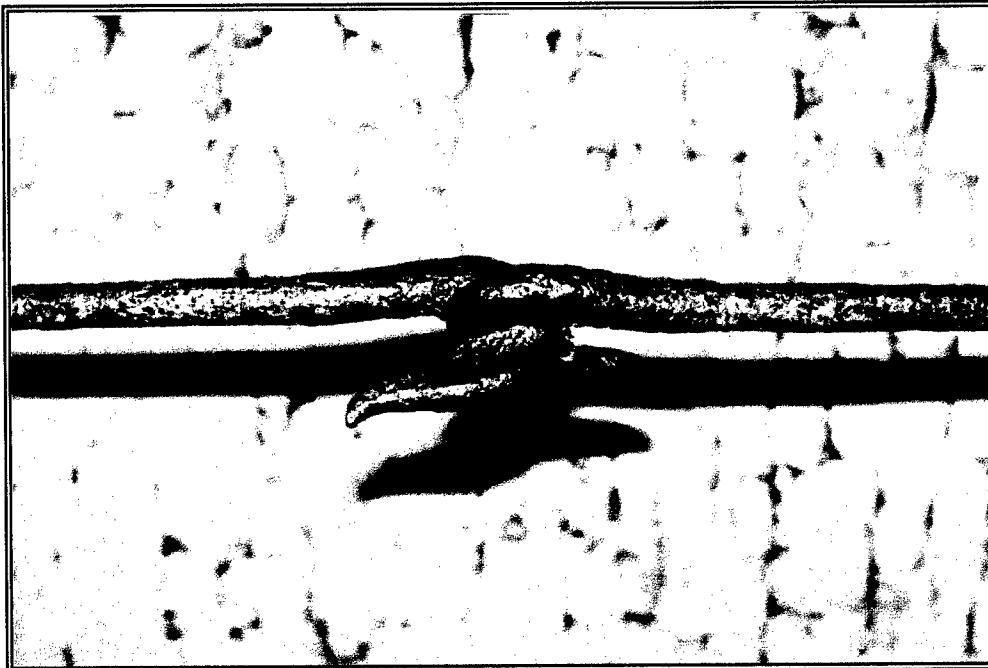


Figure 23. Close-up photo of tie rod after metal treatment.



Figure 24. Photo of threshold during metal treatment (note bluish gray coloring).

the brick columns. As indicated, exterior and interior vents are offset vertically and horizontally from each other, allowing no direct access. These openings allow air to circulate between the inner and outer brick walls of the building, apparently decreasing heat buildup in the summer, and possibly allowing excess moisture to dissipate.

The primary function of the blast vents, in concert with the double-wall construction and barrel-vaulted ceiling, was to diffuse, disperse, and limit the force of exploding powder from inside the building. Over the years, birds have built nests in the vent holes, depositing debris and obstructing air flow. The project scope of work called for installation of screens to control access to the Powder Magazine by birds and other animals.

Screening installed in the blast vent openings consisted of six-inch squares of 1/4 inch galvanized wire mesh. This material is strong enough to deter birds and small animals, and will not appreciably restrict air circulation. The wire mesh was bent to form a basket-shape and pushed into the exterior openings. The edges of the basket form were then expanded to form a friction fit in the openings. The wire was inserted far enough into the wall to obscure it from casual view. No attempt was made to attach this material permanently to the brick.

Chapter 2. History of the Montgomery Powder Magazines

Some disagreement exists over the construction date of the Powder Magazine in Powder Magazine Park. The National Register of Historic Places (NRHP) nomination form records this building as "one of the two surviving Confederate storage facilities in [Alabama]" (AHC 1972), and suggests that this magazine was copied from an earlier magazine constructed by the City of Montgomery. Local historians have suggested that this building was constructed during the 1830s or 1840s by the City as a municipal storage facility. In notes on file at the Alabama Historical Commission (AHC) and the Landmarks Foundation of Montgomery, Inc., (LFM), these individuals contend that construction of the magazine was necessitated by a City Council ordinance that made it illegal for merchants to have more than a small amount of gunpowder in their stores. This contention is partially supported by various early nineteenth century City records and pre-Civil War maps which document construction of three powder magazines in Montgomery before 1850, and imply the presence of at least one more.

Antebellum Montgomery Powder Magazines

The first powder magazine in Montgomery may have been built as early as the 1820s. On April 16th, 1833, the Montgomery City Council awarded "thirty dollars and seventy five cents . . . to E. Wingate for removing the Powder Magazine" (City Council Minutes 1833:434). No city records were found providing a construction date or location for this powder magazine.

The 1833 removal of Montgomery's first powder magazine was immediately preceded by construction of a second building for this purpose. In December 1830, a committee of two individuals, J. Wyman and Hugh W. Henry, were appointed to "ascertain what it will cost to erect a brick house 10 by 15 feet suitable for a powder house and select a place to set it" (City Council Minutes 1830:347). Wyman and Henry were asked to make a report at the next council meeting, but no report was apparently submitted; a second committee of two (B. Bradshaw and W^m B. Read) was appointed on October 25th, 1831 "to ascertain the probable expense of erecting a powder magazine" (City Council Minutes 1831:382). Less than one month later, the Council reported that

the committee appointed to receive proposals for building a Powder Magazine have rec'd sundry proposals for building the same, beg leave to report that they have acceded to the proposal of Thomas Whitacre who proposes to complete the same for the sum of four hundred dollars (City Council Minutes for November 15, 1831:385).

To begin the process of construction, J. Lambert and B. Bradshaw were appointed as "a committee to procure a lot on which to build said Magazine on the most reasonable Terms" (City Council Minutes for November 15th, 1831:385). The process of choosing and purchasing a lot took approximately five months, but on April 9th, 1832, John Lambert was "allowed the sum of thirty three dollars for a lot to build a powder magazine" (City Council Minutes 1832:405). No specific location was given in the City Council records for the location of this lot.

By the fall of 1832, materials were being selected for the upcoming construction. On October 15th, 1832, John Lambert, B. Bradshaw, and Isaac Ticknor were appointed as a committee "to inspect [and] report the quality of the brick for magazine and report at the next meeting" (City Council Minutes 1832:415). In November, the committee reported that the brick was "unfit for that purpose" (City Council Minutes 1832:416). It is likely that a new source was found, and the new powder magazine was constructed before April 1833, when the previous magazine was demolished (City Council Minutes 1833:434).

The 1830s Montgomery Powder Magazine was apparently in use until the late 1840s. On June 28th, 1847, the Montgomery City Council passed an Ordinance to Regulate the Magazine (City Council Minutes 1847:50). The original ordinance included the following sections:

Section 1.- Clerk to be elected annually to receive and deliver all powder stored in magazine.

Section 2.- No merchant shall have more than one keg of powder in store; balance to be stored in magazine.

Section 3.- Tax of 25 cents on each keg, 12 ½ cents on each ½ or ¼ keg stored, to be collected on delivery of said powder.

Section 4.- Clerk to be paid \$200, be required to give bond of \$1000.

Section 5.- Fine for disobedience of law not to exceed \$50.

The Council added another Section to the Powder Magazine Ordinance the following month (City Council Minutes, July 26th, 1847:52). This new Section described the "duty of Clerk of powder magazine to keep his office convenient to business part of city and at all times between sunrise and sunset deliver quantity of powder as owner may require."

In the fall of 1847, "a committee of three was appointed to select a suitable place for building a powder magazine, ascertain the cost of erecting said building and report at the next meeting" (City Council Minutes, October 11th, 1847:144). No reason was given for construction of a new magazine, but on November 8th, 1847, the Council "resolved that the Clerk be required to advertise for sealed proposals to build a powder magazine" (City Council Minutes 1847:149). There was a delay of three months before action was taken on this resolution; on February 12th, 1848, the Council "resolved that sealed proposals be received

until 1st April next for a plan of and building a powder magazine to be located on the site heretofore selected by Council" (City Council Minutes 1848:196). No previous reference was found in City records for the location of this site.

Construction bids were closed in early April, and on April 22nd, 1848, James F. Keating was awarded the contract to build a powder magazine (City Council Minutes 1848:209). The bid price was \$580, provided that Keating install a brick floor rather than wood over timber sleepers. Aldermen John F. Figh and James Bradley were appointed as a committee to supervise erection of the building. On May 6th, Figh and Bradley asked the Council to pay Keating \$150 in advance (City Council Minutes 1848:213).

The location for the 1848 powder magazine in Montgomery was documented in the May 16th, 1848 City Council Minutes. On that date, the Council recorded that the "proposed site for powder magazine [was on the] west side of Court Street between Fulton and Tallapoosa Streets" (City Council Minutes 1848:215). The specific location was to be selected after the survey had been made. This intersection is on the east side of downtown Montgomery, approximately 1.25 miles east of Powder Magazine Park.

Keating required approximately one year to complete construction. On June 10th, 1848, the Powder Magazine Committee announced completion of the building, according to contract, and recommended payment of the balance due (recorded as \$518) to James F. Keating (City Council Minutes 1848:217-18). The Finance Committee report for 1848 verified that \$668 had been paid for building the Powder Magazine (City Council Minutes, January 14th, 1849:284). Supplies were probably moved to the new powder magazine soon after this date, and the old (1830s) magazine was probably abandoned. On October 14th, 1848, the Council voted to give \$100 and brick from the old powder magazine to the Montgomery True Blues, a local militia group, to help them build an armory (City Council Minutes 1848:244). The following month, the City Marshall was instructed to build a hog pound in the area of the powder magazine; we assume that this was at the location of the old magazine, after the building materials were removed, as the City continued to own this property (City Council Minutes, November 25th, 1848:253).

The last entry that the author found in City records regarding the City Powder Magazine was on March 5th, 1849 (City Council Minutes 1849:295). On that date, the salary of the powder magazine keeper was increased by \$100 per year.

It is possible that at least one other powder magazine (the fourth) was constructed in Montgomery prior to the Civil War. In his recent book, *Confederate Home Front: Montgomery During the Civil War* (1999), William W. Rogers, Jr. provides an undocumented map showing the city's military facilities in 1860. On this map, Rogers (1999:55) shows a powder magazine at the northwest corner of Bell and Hanrick Streets. This site, south of the river bend in the western part of the city, differs from the circa 1848

location (Court Street between Fulton and Tallapoosa Streets). However, this depiction could also be Rogers' erroneous attempt to place the current Powder Magazine on a Civil War period map.

Montgomery's Civil War Powder Magazine

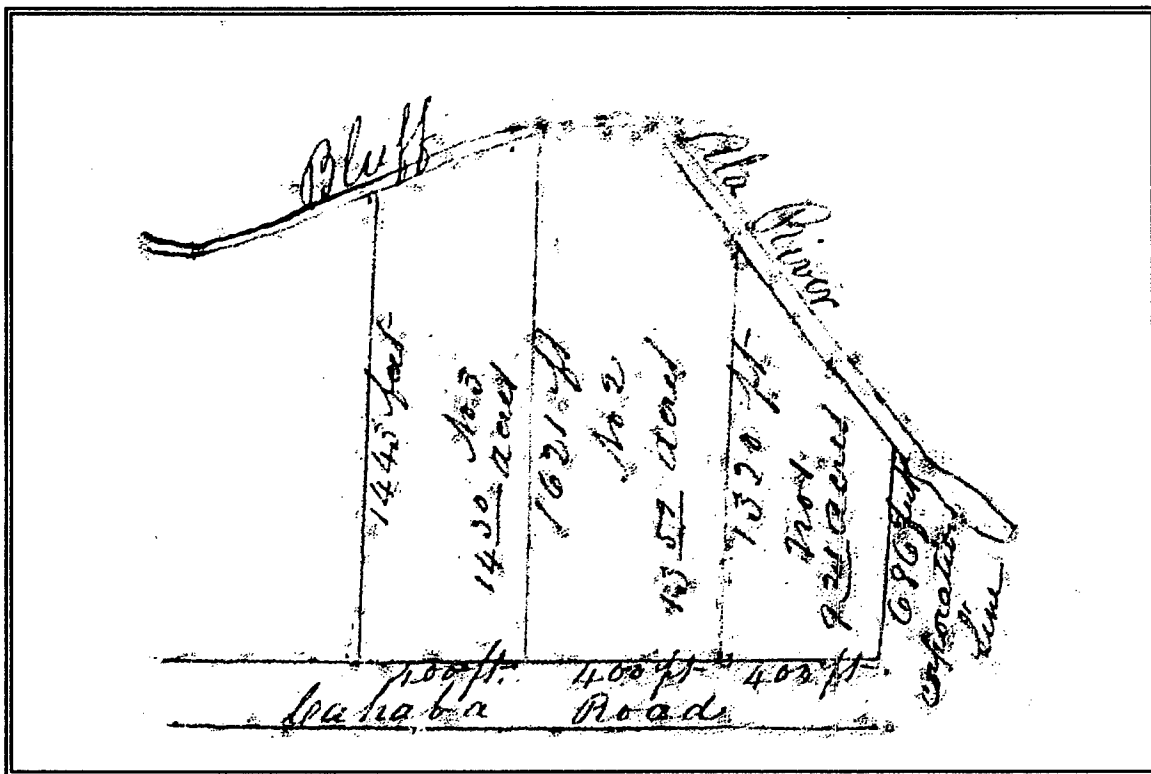
Results of intensive research on the Powder Magazine property provide no support for a pre-1860 construction of this building. Reported locations of two Montgomery powder magazines do not match this location. An exact construction date has not been found, but none of the pre-Civil War land transactions mentions a municipally-owned or operated building on the property encompassing Powder Magazine Park.

The Powder Magazine is located in Section 11 of Township 16N, Range 17E. This portion of the Mississippi Territory (part of the Cahaba Land District of Alabama) was surveyed and sold to settlers in 1817. The east ½ of the section (240 acres) was sold to John Scott of Baldwin County, Georgia on August 8th, 1817 (Montgomery County n.d. Cert./Warrant # 896; Montgomery County n.d. Tract Book MT-54:58; Montgomery County 1817 Plat Book SG 5128:87). Scott was one of several early land speculators in the area, including Andrew Dexter and Willis Roberts. These men laid out their purchases in lots and sold them to settlers. We found no record of settlement by John Scott on the property after his 1817 purchase; however, M.P. Blue's *A Brief History of Montgomery* (1878) records that the first settler in the Montgomery area, Arthur Moore, had settled in the vicinity of this tract in 1814.

The project area was in Montgomery County when the county was established in 1816, but remained outside the City of Montgomery until after 1900. Property records for the remainder of the early nineteenth century provide no evidence supporting or refuting the presence of a powder magazine on the property. Property records from this period do not typically contain references to buildings; however, it is extremely likely that a public powder magazine, constructed by and for the use of the community, would have been mentioned in property transfers if it was present.

James J. Stewart apparently purchased at least a portion of John Scott's property for speculative purposes. According to marriage and property records, Stewart had arrived in Montgomery by the early 1830s. On May 27th, 1833, James J. Stewart married Elizabeth Ann McWhorter in Montgomery County (MCMB D:70). The following year (December 5th, 1834), James J. Stewart purchased Lots 19 and 20 in Montgomery, located on the north side of Washington Street at McDonough Street, for \$650 from Andrew Dexter (MCDB 1834, Old Series H:112).

On July 7th, 1854, James J. Stewart and his wife, Elizabeth A. Stewart, sold their one half undivided interest in a 14.3 acre tract, referred to as Lot No. 3 of the Stewart and Wharton tract, to William G. Wharton for one dollar (MCDB 1854a, Old Series 6:321). Wharton had previously owned the other one-half interest in this lot. The record of this transaction includes a plat that shows three adjacent tracts bounded to the south by the Cahaba Road, to the east by the City limits, and to the north by the Alabama River and a steep bluff (Figure 25). Based on this plat, the project tract was located in the central tract, labeled Lot No. 2.



On July 13th, 1854, six days after his purchase of Lot No. 3, William G. Wharton and his wife, Elizabeth V. Wharton, sold their one half undivided interest in Lot No. 2 of the

Stewart and Wharton tract (13.59 acres) to James J. Stewart for one dollar (MCDB 1854b, Old Series 6:484). As in the previous transaction, Stewart already owned the other one-half interest in this lot. This deed includes no indication of a municipally-owned or operated powder magazine on this property.

According to Montgomery County Estate Records, the owner of Lot No. 2, James J. Stewart, died before 1859. His wife, Elizabeth V. Stewart, was named executrix of his estate. Estate records for J.J. Stewart list Elizabeth Stewart's home as Hickory Grove, Alabama, and record her paying debts on the estate from 1859 to 1863. Sometime prior to 1861, probably as part of the estate settlement, Elizabeth A. Stewart sold Lot No. 2 to William P. Ashley. The only record of this sale is included in Ashley's subsequent sale of a portion of this tract to the State of Alabama (see below). This tract is described as commencing "at a point four hundred feet west of the corporation line of the City of Montgomery on the Cahaba Road" (MCDB 1861, 20:117).

On March 7th, 1861, William P. Ashley sold a 1.04 acre lot, the northwest corner of Lot No. 2 (recorded as 13.53 acres), to the State of Alabama for \$1,000 (MCDB 1861, 20:115). This small tract (Figure 26) is described as:

including the bank or banks of the Alabama River down to said stream of low water mark bounding said acre lot on three sides, it being understood that the said acre is to be on the top of the bluff independent of and clear of the banks of the River.

According to the NRHP form (AHC 1972), the Powder Magazine was subsequently constructed on this lot. The location described above is logical for both strategic and practical purposes. Access to and from the river was essential for efficient use of a powder magazine, but periodic flooding would have mandated placement of the building on high ground.

William Ashley also included a twenty foot wide access right of way, leading north from the Cahaba Road to the one acre tract, in this sale to the State of Alabama (Figure 26). According to its plat, the right of way followed the west edge of Lot No. 2, and is likely the location of the present Eugene Street. The description of this right of way and its associated lot left little doubt as to their importance to the Confederate States of America. This right of way was "to continue so long as the State of Alabama or the Confederate States may own the said land or any part thereof and no longer" (MCDB 1861, 20:116). Ashley's sale of this tract was officially recorded more than seven years later, after the Civil War, on April 3, 1868.

Attempts to find specific construction or use records for the Powder Magazine were generally unsuccessful. However, a 1979 letter from James L. Loeb (Landmarks Foundation

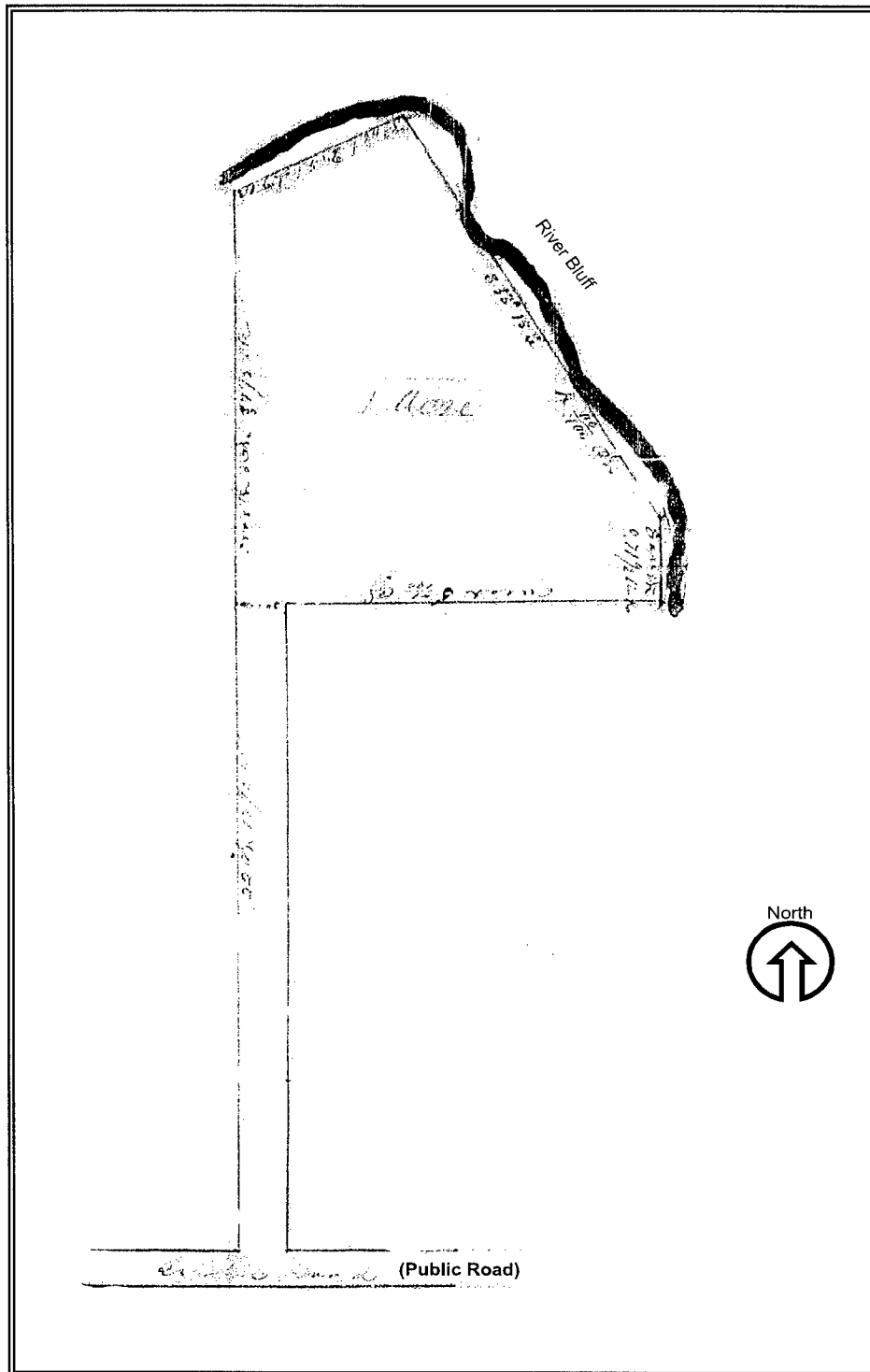


Figure 26. Plat of 1861 sale of 1.04 acre lot (northwest corner of Lot No. 2) by W.P. Ashley to the State of Alabama (MCDB 1861, 20:115)

of Montgomery, Inc.) to General George B. Pickett, (National Rifle Association) in the files of the Landmarks Foundation of Montgomery, Inc., (LFM 1979a), cites an 1862 newspaper article (no reference provided) when stating that the Powder Magazine “is a copy of an earlier Magazine built by the City of Montgomery.” This could be the same newspaper article referenced by Rogers (1999:171[notes]). Alabama Department of Archives and History staff members found this short article from the *Montgomery Advertiser*, dated March 24th or 25th [microfilm unclear], 1861:

New Powder Magazine.-- The conclusion having been forced upon those having charge of the matter, that the old powder magazine is not sufficiently capacious to contain as much of the “villainous saltpeter,” as might be needed in certain contingencies, have determined to build a larger one near the Montgomery and West Point Railroad depot.-- Our young friend, Pelham J. Anderson, is the architect, and George M. Figh the contractor. We doubt not it will be a substantial building.

No other historical references were found for construction or completion of the Powder Magazine. While the location proposed for the powder magazine in this article does not match its current location, the article’s date is only 17 to 18 days after Ashley’s sale of the property to the State of Alabama. Based on subsequent information, we can assume that the proposed location was changed, subject to the State’s acquisition of property at another location outside the western city limits.

The Powder Magazine was probably used throughout the war. In April 1865, as Union troops approached the city, retreating Confederate troops burned the cotton warehouses to avoid their capture by Union troops (Rogers 1999:146). It is likely that troops also removed powder and munitions from the State’s powder magazine for the same reason.

No photographs of the Powder Magazine during or immediately after the Civil War were found during this research. The earliest depiction of the Powder Magazine was found in an 1887 perspective view of Montgomery (Wellge 1887). Figure 27 is the entire view. An enlarged inset has been added showing the Powder Magazine as a small, windowless building, relatively isolated above the Alabama River bluff.

The State of Alabama retained ownership of the Powder Magazine and its surrounding tract for the remainder of the nineteenth century. At the turn of the twentieth century, this property was located outside the limits of the City of Montgomery (Figure 28). The first actual reference to the Powder Magazine was found in turn-of-the-century property records. On August 22nd, 1901, the State of Alabama sold the one acre tract, referred to as the Magazine Lot, to James Taylor Roberts for \$500 (MCDB 1901a, 49:273). The sale was conducted under an act of the General Assembly of Alabama, approved on December 9th, 1896 (Acts 1896-97:152). This transaction specifically notes that “the brick building” [the

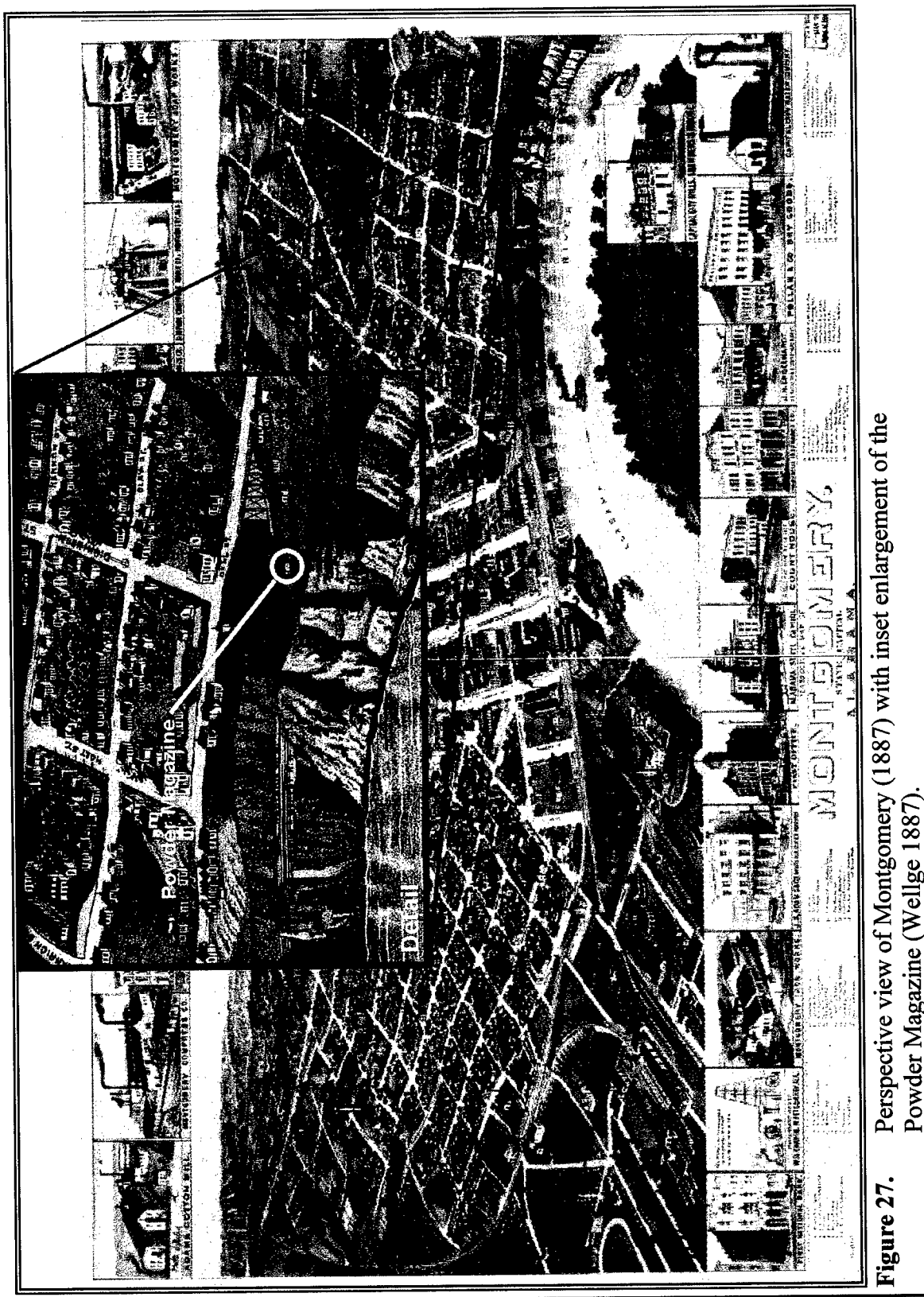


Figure 27. Perspective view of Montgomery (1887) with inset enlargement of the Powder Magazine (Wellge 1887).

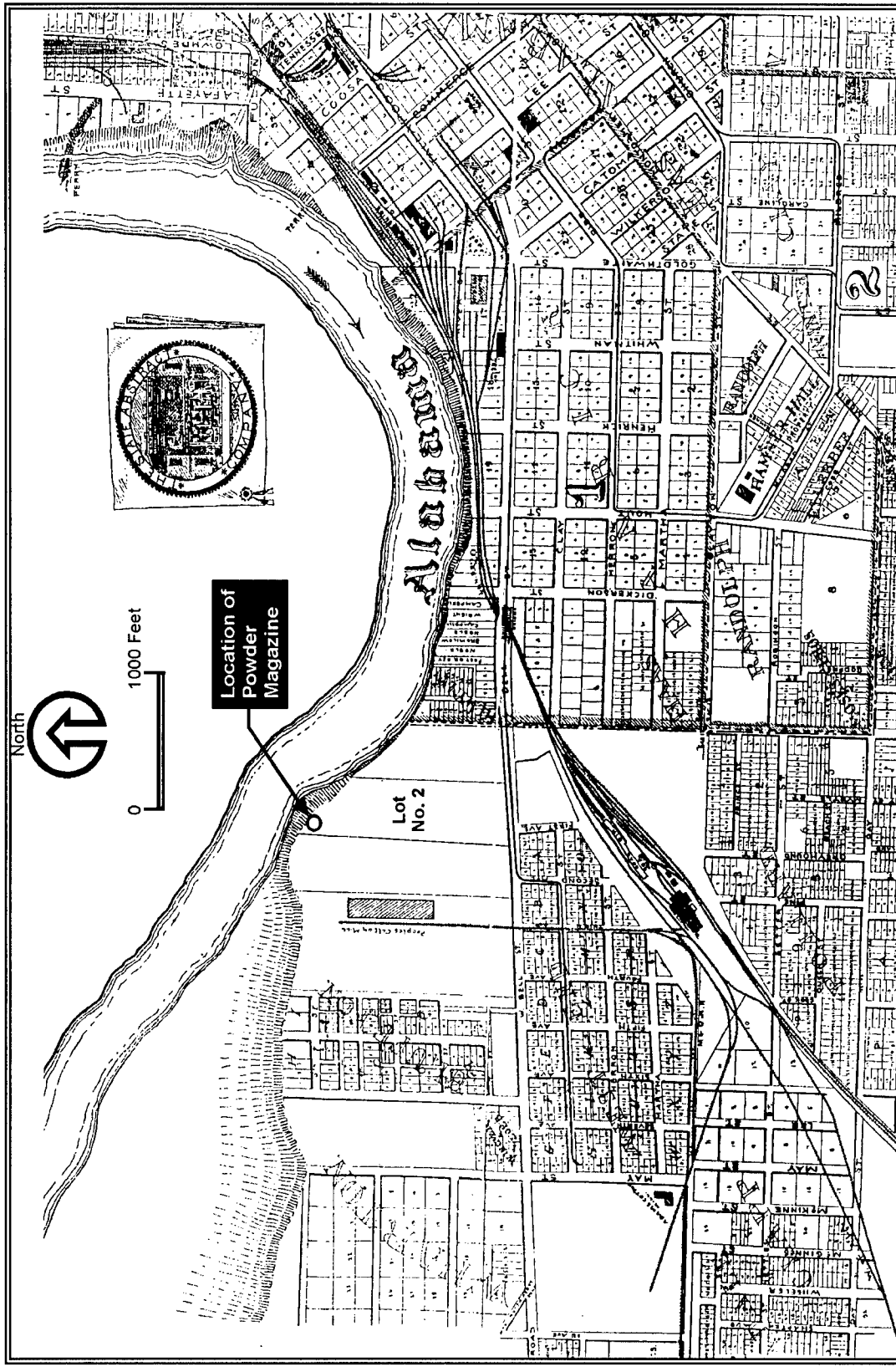


Figure 28. Portion of The State Abstract Company's (1899) City of Montgomery, Alabama, showing location of the Powder Magazine.

Powder Magazine, measuring 28 feet by 37 feet] and an area measuring 29.1 feet by 39.1 feet around the building were "expressly excepted from the property embraced in the above description." Therefore, despite this sale of the property surrounding the Powder Magazine, the building itself and a 1 by 2 foot buffer around the building remained under State ownership.

Two months earlier (June 7th, 1901), James T. Roberts had purchased a right of way to the Magazine Lot from the adjacent Peoples Cotton Factory for \$250 (MCDB 1901b, 49:273). According to the deed, this purchase was approved through a resolution of the Board of Directors of the Peoples Cotton Factory, during their meeting on May 13th, 1901.

The area immediately south of the Powder Magazine became a part of the City of Montgomery after the turn of the twentieth century. A 1902 plat (Figure 29) of the Midway subdivision (formerly Wharton's Lot No. 2) encompasses the area north of Bell Street and includes Eugene and Magnolia (now Gordon) Streets. The "Magazine Lot" is shown at the north end of this subdivision (Garrett Plat Book:16).

While the tract surrounding the Powder Magazine was in J.T. Robert's possession, he sold gravel from the property. The adjacent landowner, Mr. Chappell, filed suit against him (in equity court) "to enjoin trespass upon said lands." At the November 1903 term, the Alabama Supreme Court ruled in favor of Roberts (Chappell vs. Roberts 1903, 140 Alabama:324). Four years later, Chappell filed another suit of "ejectment" against Roberts. On April 4th, 1907, the Alabama Supreme Court again ruled for Roberts (Chappell vs. Roberts 1907, 150 Alabama:457).

Over the next ten years, the Powder Magazine tract exchanged ownership twice. On September 16th, 1908, James T. and Katie S. Roberts sold the one acre tract, again excluding "the Magazine and property covered thereby," to I.O. Anderson, of Anderson Sand & Gravel Company, for \$1,500 (MCDB 1908, 70:420). On April 10th, 1916, the Magazine Lot (excluding building) was sold to James Hodgson by the Anderson Sand & Gravel Company (MCDB 1916, 96:268). Hodgson was president of the company.

James Hodgson died in the early 1930s, and the First National Bank of Montgomery was named executor of Hodgson's estate. A bill in equity was filed in the Circuit Court of Montgomery County, and a decree was made and entered by the Circuit Court on January 22nd, 1936. A compromise of all claims against the estate authorized the First National Bank of Montgomery to convey all of said one acre "except the Brick Magazine and the land covered thereby, measuring 29.1 feet x 39.1 feet" to Elizabeth N. Hodgson (MCDB 1936, 199:99).

On October 20th, 1939, Charles W. Lee (Chief of the Alabama Division of Lands and Properties) submitted a report on the State Powder Magazine to the State Department of

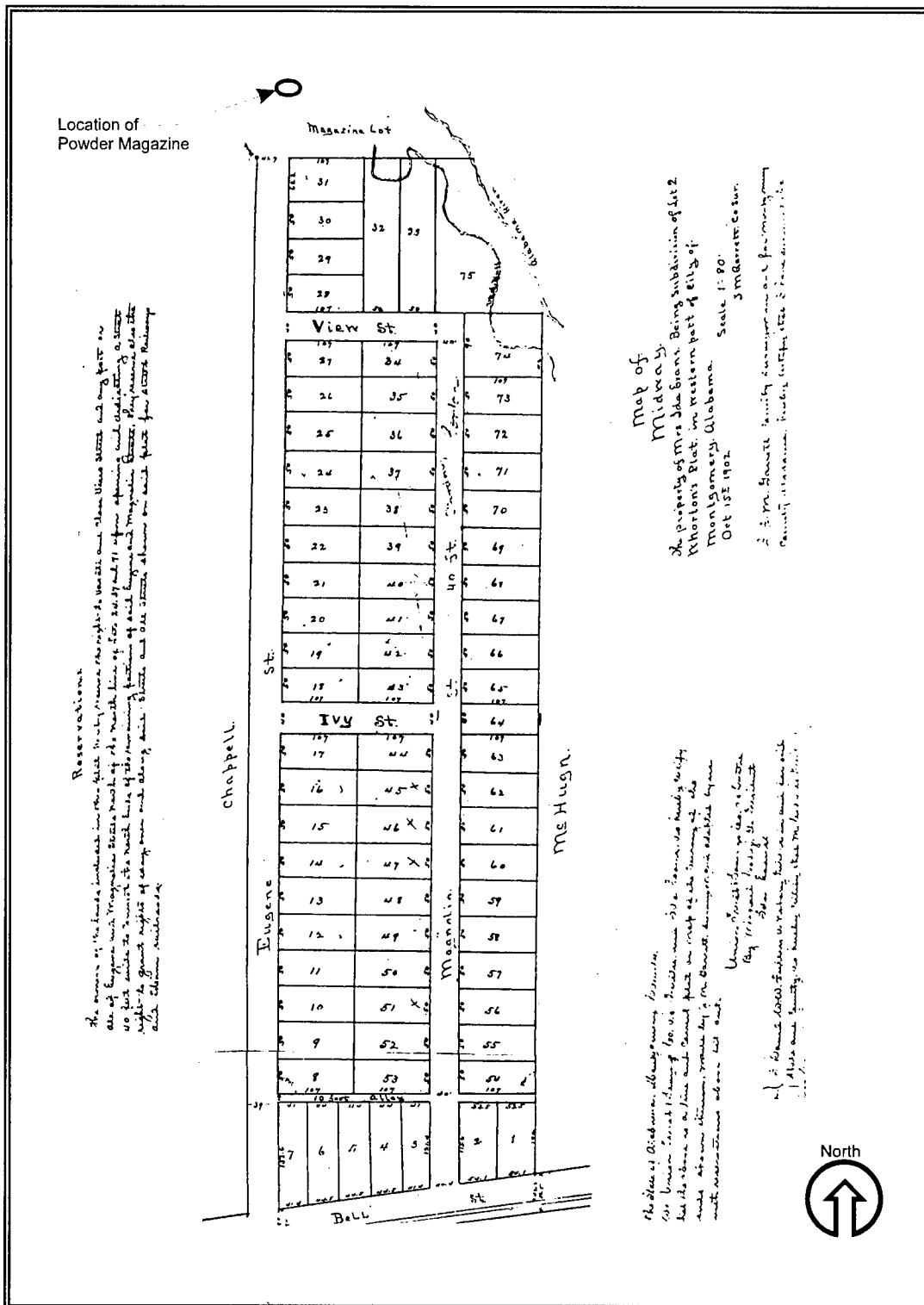


Figure 29. Map of 1902 Midway subdivision (Garrett Plat Book:16).

Finance. After providing a property chain of title, beginning at Alabama's purchase of the tract from William Ashley in 1861, Lee noted that a Mr. Revis was currently (October 1939) occupying the brick building, as a renter from the First National Bank of Montgomery, administrator of the estate of James Hodgson. As the building was owned by the State of Alabama, Lee had requested that the bank provide records of the amount of rent collected from Revis to date and then remit this amount to the State. Lee ended his follow-up report on the property (dated November 24th, 1939) by stating

the property has a very small value, and I recommend that same be turned over to the United Daughters of the Confederacy for a Confederate monument. Mrs. Owen, of the Department of Archives and History, advised that the United Daughters of the Confederacy would place a suitable marker on same.

Previous Development and Restoration Efforts at the Powder Magazine

The author conducted extensive records research at relevant local, state, and federal agencies and records repositories (see Chapter 1) to document recent (i.e., post 1940) activities at the Powder Magazine. This research is summarized in an annotated list, included in this report as Appendix D. The author found very little information regarding the Powder Magazine in public records between 1940 and the early 1970s. Records at the AHC indicate that the first preservation efforts for the building were conducted by the Historic Montgomery Foundation, under an agreement with the State Conservation Department, between 1955 and 1958. A reported pre-1960 article on the Powder Magazine in the Sunday Montgomery newspaper could not be found.

The State of Alabama retained ownership of the Powder Magazine until the early 1970s. An August 8th, 1972 article in the *Montgomery Journal* (Bailey 1972) announced the proposed development of a public park by the US Army Corps of Engineers (USACE), centered around the soon-to-be-restored Powder Magazine. A National Register of Historic Places (NRHP) nomination form was completed for the building in December 1972, and the building was accepted for listing on April 13, 1973 (AHC 1972). Early in 1973, the City of Montgomery and the USACE, Mobile District, began plans to develop a park around the Powder Magazine. A letter from John Dudley Scruggs (Scruggs and Hammond, Inc., architects/planners) to W. Warner Floyd of the Alabama Historical Commission (AHC) dated March 12th, 1973, describes a report on the Powder Magazine written by Scruggs and using historical and architectural information provided by Joe Clark of the USACE (AHC 1973). Two July 25th, 1973 newspaper articles (Berney 1973; *Montgomery Journal* 1973) describe plans for the City's purchase of the Powder Magazine property from the State and adjacent tracts from individuals, sale of this property (totaling 60 acres) to the USACE as

part of Jones Bluff Dam Recreation Area, then transfer of the combined tracts to the City Parks and Recreation Department.

On November 7th, 1973, under Act No. 831, Acts of Alabama, Regular Session of 1973, the State of Alabama granted the Powder Magazine and immediately surrounding land to the City of Montgomery (MCDB 1973, 215:53). Three months later (February 22nd, 1974), Landmarks Foundation of Montgomery, Inc., (LFM, representing the City of Montgomery), contracted with the Montgomery architecture and engineering firm of Tiller, Butner, Rosa & Seay for the first phase of building restoration. This phase consisted of architectural, structural, and electrical drawings (as needed), and specifications (LFM 1974). These mylar drawings are on file at the USACE, Mobile, and are reproduced in Appendix C.

A June 10th, 1975 Narrative Appraisal Report completed for the USACE provides a pre-restoration assessment of the Powder Magazine (OAS 1975). The fair market value for the 2.75 acre tract (Tract No. 937, Jones Bluff Lock and Dam Project) was \$39,000, but no monetary value was placed on the Powder Magazine. High ground was described as including an "old civil war powder magazine. . . The building has had little or no care and as might be expected it is in rather poor condition."

On July 23rd, 1975, plans and specifications for development of the Powder Magazine Access Area, Jones Bluff Lake, were sent to the USACE, Atlanta for review and approval, and park construction was scheduled for fall 1975 (LFM 1975).

The City of Montgomery sold the Powder Magazine Tract, consisting of approximately 2.75 acres, to the United States of America on August 27th, 1975 (MCDB 1975, 310:330-331). The following month, the USACE, Mobile began discussing possible lease arrangements with the City of Montgomery (USACE, Alabama River Lakes 1975). The USACE stated that they would "outgrant [under a long-term lease] the Powder Magazine Area of the Jones Bluff Project to the City of Montgomery for management and maintenance of the area as a park," and that initial development would be completed by the fall of 1977.

A March 30th, 1976 letter from Jim Robinson, the Mayor of the City of Montgomery, to Colonel Drake Wilson, the USACE, Mobile District Engineer, confirmed the two-part recreational development plans for the Powder Magazine site. The upper portion (bluff-top) portion of the park was to include restoration of the Powder Magazine and construction of an overlook with toilets and parking. A boat launch, picnic area, portable toilets, access road, and parking were to be built in the lower portion, on the lake and lake terrace (USACE, Alabama River Lakes 1976a).

Property transfers and development plans during the middle 1970s brought new emphasis to ongoing problems at the Powder Magazine. A Disposition Form submitted on November 27, 1974 by Robert M. Creswell (Resource Manager, USACE, SAMOP, FO-AR)

noted that the site was becoming a refuse dump, and suggested that the site should be posted and maintained (USACE, Alabama River Lakes 1974). Creswell's April 22nd, 1976 memo described "evidence of ongoing trash dumping," and USACE Rangers noted that the Powder Magazine was "open to vandalism and a fire has been built in it recently"(USACE, Alabama River Lakes 1976b). By August 26th, 1976, conditions had improved, and Creswell sent a letter to W.J. McFarland, Public Works Director for the City of Montgomery, thanking City employees for cleaning up trash dump at the Powder Magazine (USACE, Alabama River Lakes 1976c).

Prior to development around the Powder Magazine and restoration of the building, the USACE submitted plans to the Advisory Council on Historic Preservation (ACHP) and requested a determination of no adverse effect to this NRHP listed property (USACE, Mobile 1977a). On July 13th, 1977, Robert M. Utley, Deputy Executive Director, ACHP, responded to Lawrence Green (Chief of the Planning Division, USACE, Mobile) by stating agreement on determination of no adverse effect, under the following conditions:

- (1) USACE was to consult with Interagency Historic Architectural Services, National Park Service, regarding preferred method for cleaning brickwork; and
- (2) USACE was to test samples of the brickwork for potential damage prior to cleaning the building (USACE, Mobile 1977a).

This letter was returned with USACE concurrence on July 22nd, 1977; acceptance of USACE concurrence and agreement not to object to determination of no adverse effect was sent by the ACHP to the USACE on July 27th, 1977 (USACE, Mobile 1977b).

A 1977 University of Alabama cultural resources survey provides a description and a photograph of the Powder Magazine prior to its restoration (Oakley and Watson 1977). The Powder Magazine was recorded as an archaeological site (1MT33) in the 58-acre Powder Magazine Access Area. Oakley and Watson (1977:331) repeat previous local accounts regarding the history of the building. They cite Blue et al. (1878:5) in providing an 1840 construction date for the building, and in describing its initial use as a commercial building. Oakley and Watson (1977:331) also quote local sources in describing the "barrel vaulted roof originally conceived by the French architect Vaudan [sic; Vauban]." They observed that the building is generally sound, but not maintained and dilapidated (Figure 30).

An August 31st, 1977 memo from Jerry Nielsen (USACE, Mobile 1977c) discussed proposed rehabilitation of the Powder Magazine, in accordance with the Memorandum of



Figure 30. Photo of the Powder Magazine from Oakley and Watson (1977:337).

Agreement (MOA) with the ACHP. Nielsen stated that Ann Grimmer (Technical Preservation Services Division, Office of Archaeology and Historic Preservation, National Park Service, Washington, D.C.) had noted and requested information on several aspects of the restoration efforts, including whether the exterior stucco was original, and whether the building interior required cleaning. She preferred no silicon coating on the building, and requested that mortar for repointing conform to *Preservation Brief 2: Repointing Mortar Joints in Historic Brick Buildings* (Mack and Speweik 1998). She also requested photographs of the four sides of building.

A 1978 *Montgomery Advertiser/Alabama Journal* newspaper stated that a \$845,000 contract for development of Powder Magazine Park had been awarded to a Columbus, Mississippi firm (Columbus Building & Supply Company) and quoted USACE personnel stating that restoration of the "old Confederate Powder Magazine [was] to be complete by mid-May 1979" (*Montgomery Advertiser/Alabama Journal* 1978). Park development plans included construction of a pavilion, walkways, and picnic tables, as well as landscaping 58 acres. James Dees (USACE, Alabama River Lakes Office) stated that work had been delayed by bad weather, but was to begin in the spring.

The USACE made a number of inspection visits during the course of the initial development at Powder Magazine Park. In May 1978, representatives from the USACE, the Alabama State Historic Preservation Office (AHC), LMF, and the construction contractor met on-site to discuss the upcoming work (USACE, Mobile 1978a). This group discussed steam cleaning of building exterior (to be monitored by USACE personnel), careful hand-removal of stucco patches on the exterior, interior cleaning to expose possible patching, retention of plywood roof decking (covered with slate), and hiring of brick mason for brick replacing and repointing. It was agreed that the interior was not to be whitewashed, despite inclusion of this task in the project specifications, and that another on-site meeting would be held after interior and exterior cleaning has been accomplished.

Following a June 19th, 1978 inspection by USACE and AHC, Carl V. Kling Jr. (USACE Architect) submitted a memo regarding steam cleaning of the exterior bricks (USACE, Mobile 1978b). Steam cleaning was determined to be ineffective in general, but did not damage original brick on the upper portion of building. Steam cleaning was effective in removal of efflorescence which had developed from lime patching mortar and from previous stuccoing on patching bricks. The patching bricks which had been used did not match, but inspectors determined them to be "tolerable;" however, they found it disturbing that the patching mortar also did not match. Kling and Milo B. Howard (AHC) recommended cutting back and tuck pointing all exterior mortar joints. Kling also referred to confusion in restoration specifications regarding the percent of brickwork requiring remortaring, and recommended a change order in the contract to cover cutting back and repointing 100 percent of the exterior.

From late 1978 to late 1979, various individuals provided exhibit suggestions for the restored Powder Magazine and Powder Magazine Park. At the request of the City of Montgomery, James L. Loeb (President, LFM) provided several ideas, including: installation of plate glass in the entrance, with iron gates closed in front; dim lighting in the building interior; adding appropriate furnishings (provided by LFM); erecting a State historic marker; and installing educational panels at the overlook describing the geological history of the Bluff, and river valley and outlining human habitation history (AHC 1978).

In the fall of 1979, Loeb corresponded with General George Bibb Pickett (President, National Rifle Association, Montgomery), requesting his help in determining furnishings and possibly sponsoring exhibits in the Powder Magazine (LFM 1979b). Pickett responded with an offer for his personal help and a promise to discuss the project with the NRA staff in Washington, D.C. (LFM 1979a). On November 26th, 1979, Loeb sent a letter to Montgomery Mayor Emory Folmar announcing Pickett's interest in leading a committee for developing exhibits at the Powder Magazine, focusing on Civil War artifacts, and stating that Mrs. Aubrey Neeley would work with Pickett on descriptive plaques at the park overlook (LFM 1979c).

Building restoration work continued through the fall of 1979. On September 19th, 1979, Basil Dishongh, Jr., (President, Columbus Building & Supply Company) sent a letter regarding their ongoing work at the Powder Magazine to the USACE Area Engineer (USACE, Mobile 1979). Dishongh noted that color photographs of the building sent to him by USACE representatives did not match the current bricks and mortar joints, and stated that more than five percent of the bricks would have to be removed.. The contractor had been asked to complete the interior brickwork first, and was waiting for a requested contract change order before beginning outside brickwork. Dishongh estimated that the cost for additional work would be more than \$25,000.

Correspondence indicates that development of Powder Magazine Park, including Powder Magazine restoration, was to be complete before management of the park was turned over to the City. No documents were found that specify the date of park completion, but on July 3rd, 1980, Melvin W. Dovith (USACE, Chief, Real Estate Division) sent the lease for Powder Magazine Park (signed by the Secretary of the Army on July 1st, 1980) to the Mayor of Montgomery, and included a proposed schedule for inventory and condition reports (USACE, Mobile 1980). The park consisted of four tracts (916, 937, 938, and 939) comprising 62.38 acres, in the R.E. "Bob" Woodruff Project Area, designated for public park and recreation purposes. According to a July 6th *Montgomery Advertiser* article (not found, but cited in USACE, Alabama River Lakes 1980a), the boat ramp was open (although unfinished) on the July 4th weekend.

Nearly a year passed between the signing of the lease agreement for Powder Magazine Park by the Secretary of the Army and signing by the City of Montgomery. Delays

were caused, in part, by disagreements over park maintenance responsibilities and completion of park facilities construction. Between July and December 1980, city officials and USACE personnel discussed aspects of boat harbor dredging. The city initially requested dredging by the USACE on an as-needed basis and questioned whether Powder Magazine Park was to be completed according to the plans and specifications originally submitted (USACE, Alabama River Lakes 1980b). Dovith (USACE) responded by citing a March 30th, 1976 letter from former Montgomery Mayor Jim Robinson that stated that all park operations, including dredging, would be performed by the city (USACE, Alabama River Lakes 1980c). In this letter, Dovith also stated that all facilities and improvements (except for landscaping) had been completed, and that a security fence had been erected as requested by the city.

As indicated above, Powder Magazine Park lease negotiations were apparently completed in the spring of 1981. In early April 1981, a city official stated that the lease had been submitted to the mayor for his signature, but was unsigned, and that the lease was to be submitted to the city council "within the next few weeks" (USACE, Alabama River Lakes 1981a). On May 28th, Creswell (USACE) sent a letter to McKinney (City of Montgomery) requesting return of signed Joint Survey and Inspection of Conditions of Leased Property forms that had been sent to McKinney on February 4th (USACE, Alabama River Lakes 1981b). In a May 29th, 1981 response from McKinney (Montgomery) to H.C. Weiss (USACE, Acting Chief, Real Estate Division), McKinney advised the USACE that city action on the lease agreement would be completed by the third week in June and that the signed Joint Survey and Inspection of Conditions of Leased Property forms would be returned to Robert M. Creswell (USACE, Resource Manager) "within the same time frame" (USACE, Alabama River Lakes 1981c).

Project correspondence after the lease was signed and before late 1988 consists primarily of discussions between officials of the City of Montgomery and the USACE regarding administration and maintenance of Powder Magazine Park (see Appendix D). General issues include boat harbor dredging, general maintenance activities, and repair and replacement of park facilities (e.g., restroom fixtures, water fountains, signs). Other issues discussed in this period of correspondence include vandalism, littering, theft, and erosion.

In the winter of 1988, USACE officials began to voice concerns for the deteriorating condition of the Powder Magazine. A May 22nd, 1989 memo from Hugh McClellan (Chief, Environment and Resources Branch, USACE, Mobile) to Ernie Seckinger (PD-ER, USACE, Mobile) requested an architectural inspection of the Powder Magazine and a report suggesting possible remedial actions (USACE, Mobile 1989a). December 1988 photos enclosed with this memo show areas of deterioration since completion of the 1978-80 restoration. Remedial measures were to be coordinated with the AHC.

A field inspection of the Powder Magazine was conducted by personnel from the USACE, Mobile on August 1st, 1989 (USACE, Mobile 1989b). Accessing the building required cutting the lock. Lights were found to be inoperative, but the following observations were made: termite tunnels from ceiling, vent holes filled with red coarse sand, drip marks in debris at north wall base, north side of roof sagging, roof felt exposed at roof edge, portland cement used as slate roof sealant. MacDonald Brooms and Elizabeth Brown (AHC) recommended removing hackberry trees and adding a course of slate at the building eaves.

A memo from another member of the August 1st inspection team, Billy R. Thompson, Sr. (USACE, Mobile 1989c) recorded: dampness and mortar deterioration on the lower half of exterior walls; algae growth on the brick cornice; minimal efflorescence on columns and interior walls; gaps in slate allowing water to enter wall cavity; sagging north slope of roof (possible due to termites and water); wall cavity filling with spalled brick; interior spalling of brick and mortar; and termite infestation. Thomas provided suggestions for building maintenance, focusing in roof repairs, including: removal of the roof (slates, clay tile ridge, hip members) and repair of the deck; addition of copper eave flashing and new roof felt; removal of material from cavity space and vent holes to restore wall ventilation; and treatment for termites. This work was to be followed by reframing the roof with heart pine, removal of existing mortar to 1 inch deep and tuck pointing with new mortar. Thomas also included photographs of existing conditions and cost estimates for stabilization and restoration.

Based on stipulations in the lease agreement between the Department of the Army and the City of Montgomery, the USACE determined that "repairs required to maintain the Powder Magazine are the responsibility of the City of Montgomery" (USACE, Alabama River Lakes 1989). However, the USACE expressed willingness to use Operations & Maintenance funds to perform repairs where damage "is a result of inferior materials used or workmanship performed during the Corps's restoration."

An undated "Scope of Work for Roof Repair-Historic Powder Magazine Building, Powder Magazine Park, R.E. 'Bob' Woodruff Lake" describes actions to be performed (USACE, Alabama River Lakes n.d.). This scope required removal of existing tile and slate and existing wood structure. Framing and decking was to be replaced using treated 2 by 8s and ½ inch CDX plywood. New copper flashing and new 30 pound felt was to be installed, and slate and ridge tiles were to be replaced using copper nails. The scope also included a suggested contractor (Standard Roofing of Montgomery) and other potential bidders (Montgomery Roofing Company, Alabama Roofing and Sheet Metal).

Bids for the proposed Powder Magazine work were received on December 11th, 1989 (from Montgomery Roofing Co., Inc.) and on January 22nd, 1990 (from Standard Roofing of Montgomery, Inc.) to repair the roof of the Powder Magazine (USACE, Mobile 1989d).

On February 6th, 1990, following approval of the Scope of Work by Elizabeth Brown (AHC), the bid from Standard Roofing of Montgomery was accepted (USACE, Mobile 1990).

No USACE records were found specifically documenting roof removal, repair, and reinstallation. The current *Historic Properties Management Plan for R.E. "Bob" Woodruff Lake, Alabama River, Alabama* states that the slate roof was replaced in 1991 (USACE, Alabama River Lakes 1993). This management plan repeats observations and recommendations first provided in a March 1992 Historic Resources Site Inspection (USACE, Mobile 1992). The USACE inspector's comments reflect continuing concerns over building deterioration. Inspectors noted that "many problems remain to be resolved before the structure achieves a stabilized state." These problems included sloppy grouting on the new ridgecap tiles, broken and missing slate shims (corner brick dentil supports), apparent settling of northeast corner of building, tunneling spiders, missing and loose mortar, rusted metal threshold, rotting wood doors, missing screens over vent holes, and lack of informative signage. Based on these observations, the USACE recommended "that a historic architect analyze the building and prepare a comprehensive plan for restoration and stabilization of the building." A May 5th, 1997 Historic Property Inspection Summary records conditions similar to those noted five years earlier and recommends that "an historic architect should prepare a restoration plan which should be executed with a professional services contract that will also record the buildings history, alterations, and provide a long-term maintenance plan" (USACE, Mobile 1997).

The USACE's *Historic Properties Management Plan for R.E. "Bob" Woodruff Lake, Alabama River, Alabama* (1993:20) provides recommended management actions for archaeological sites and for the Powder Magazine. These actions include:

- Regular monthly patrols
- Annual monitoring
- Restoration and maintenance plan
- Restoration
- Resolution of caretaker responsibility
- Interpretation

The USACE attempted to address the fifth action in a June 18th, 1997 letter to the AHC (USACE, Alabama River Lakes 1997). In this letter, the USACE noted continuing maintenance problems and budgetary constraints, and requested that the AHC consider transfer of the building to them in fee simple. The author found no record of the AHC's subsequent response to this request.

There is limited project correspondence in USACE files after June 1997 regarding the Powder Magazine. Powder Magazine Park was closed to the public during this period,

apparently due to on-going security and maintenance issues. In January 1999, Ernie Seckinger (USACE archaeologist) and Bobby Southerlin (Brockington and Associates, Inc., archaeologist) discussed possible building maintenance efforts, to be conducted under Brockington and Associates' indefinite delivery order contract with the USACE. Seckinger transmitted previous building inspection notes to Southerlin, and they agreed that a meeting at the Powder Magazine with representatives from the AHC would be necessary and beneficial to developing an appropriate level of effort.

Maintenance and preservation strategies were discussed on-site on February 10th, 1999. Participants at this meeting were: Ernie Seckinger, Edward "Ike" Lyon, and John Bennett (USACE); Kim Harden, Ed Hooker, and Camile Bowman (Alabama Historical Commission [AHC]); Durand Seay and Tim Vaught (Architecture by Acanthus); and Bobby Southerlin (Brockington and Associates, Inc.). AHC staff members, USACE personnel, and preservation architects provided essential advice on technical and practical issues and offered personal support to the building maintenance efforts. A level of effort was developed, based on these comments and on relevant federal standards and guidelines (Secretary of Interior's *Standards and Guidelines for Architectural and Engineering Documentation*, Historic American Building Survey (HABS) and Historic American Engineering Resources (HAER) standards, *Rehabilitating Historic Buildings*, and appropriate National Park Service *Preservation Briefs*). The level of effort for building maintenance was submitted by USACE to the AHC April 1999, and the SHPO/AHC concurred on June 8th, 1999 (USACE, Mobile 1999). The author (Brockington and Associates, Inc.), in conjunction with Randy Seay and Tim Vaught (Architecture by Acanthus), began historical and architectural documentation of the building in late April 1999. Building maintenance at the Powder Magazine began on August 9th, 1999, and was completed in November 1999.

Chapter 3. Management Recommendations

Restoration of the Powder Magazine in the late 1970s was conducted under provisions of a no adverse effect determination from the Department of the Army, with concurrence from the Advisory Council on Historic Preservation (July 13, 1977 letter on file, USACE, Mobile). In the concurrence letter, the US Army Corps of Engineers, Mobile District (USACE) agreed to consult with the Technical Preservation Services Division of the National Park Service regarding brick cleaning methods.

Between April and September 1999, Brockington and Associates, Inc., conducted historical research and administered architectural maintenance of the Powder Magazine. The primary goals of this work were correction of site drainage problems and repair of damage caused by excessive moisture. This work was conducted under an indefinite delivery order contract with the US Army Corps of Engineers, Mobile District (USACE). Research and maintenance work were conducted in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 (NHPA, as amended), implementing regulations of the USACE (33 CFR Part 325, Appendix C: *Procedures for the Protection of Historic Properties*), and appropriate National Park Service *Preservation Briefs*. Elizabeth Brown (Deputy SHPO, AHC) approved the level of effort for building maintenance on June 8th, 1999 (letter on file, USACE, Mobile). Results of this work are documented in this report.

The current Historic Properties Management Plan (HPMP) for R.E. "Bob" Woodruff Lake, Alabama River, Alabama (USACE 1993) provides a brief review of previous restoration and repair work in the late 1970s and in 1991. Management actions developed for the Powder Magazine are stated in the HPMP (1993:20 [Table 3]), and include regular (monthly) patrol, annual monitoring (with Alabama SHPO staff), development of a restoration and maintenance plan, restoration, resolution of caretaker responsibility, and interpretation.

Management actions currently undertaken under the 1993 HPMP should continue in effect. Despite recent improvements, results of previous inspections support the need for continued monitoring of building condition. Each inspection report should include detailed building element condition assessments. Written descriptions and photographs should document conditions of individual structural elements, including exterior walls, roof, doorway, interior walls, ceiling, floor, support posts, iron beams, and iron tie rods, noting changes from the previous inspection and any potential threats to building structural stability and security. These reports should be incorporated into an action plan that defines areas of critical concern (e.g., structural problems that could result in imminent building collapse or personal injury), and areas of moderate concern (e.g., conditions that indicate future preservation problems) and also proposes corrective measures.

The majority of the building deficiencies noted during previous inspections were apparently corrected by the 1991 roof repairs and by the current building maintenance tasks. The roof no longer sags. No termite tunnels are present on interior walls. No evidence of water infiltration was noted on the floor or walls, indicating that roof repairs were effective. Improved drainage has begun to dissipate dampness on lower exterior walls.

Despite these improvements, other conditions detrimental to building preservation remain. During the current maintenance efforts, the following conditions were observed which could not be corrected under the current scope of work:

- Interior brick wall surfaces are deteriorating (Figure 31). Previous moisture problems, combined with attempts to paint/stucco walls (and to remove previous wall treatments) and use of portland cement as mortar, has caused damage to brick surfaces. Soft interior surfaces of original and replacement bricks are exposed and are extremely eroded. Many bricks have lost as much as ½ inch of surface depth; surrounding mortar joints are chipped and cracked. *This is a serious, on-going problem that requires an immediate solution.* During the current stabilization efforts, brick and mortar debris was vacuumed from the floor to provide a basis for monitoring rate of deterioration.
- Brick and mortar dust continues to accumulate on the building floor. This material originates from two sources: inside the walls (deposited on the floor at the interior openings of the blast vent holes); and from the surface of the interior brick walls (soft brick is deteriorating and spalling; see above). If left to accumulate, this debris retains moisture and acts as an abrasive, contributing to deterioration of the brick floor.
- Bricks on top of the southeast interior brick column are cracked and crushed, and some mortar joints have separated (Figure 32); The apparent cause is excessive weight on this column.
- The steel door frame, door bars, and transom bars are generally sound, with minimal rust. However, portions of the frame in contact with brickwork exhibit substantial rust that could eventually affect the frame structure.
- The wooden doors are deteriorating. The doors are warped, paint is flaking, and the door bottoms are rotting.

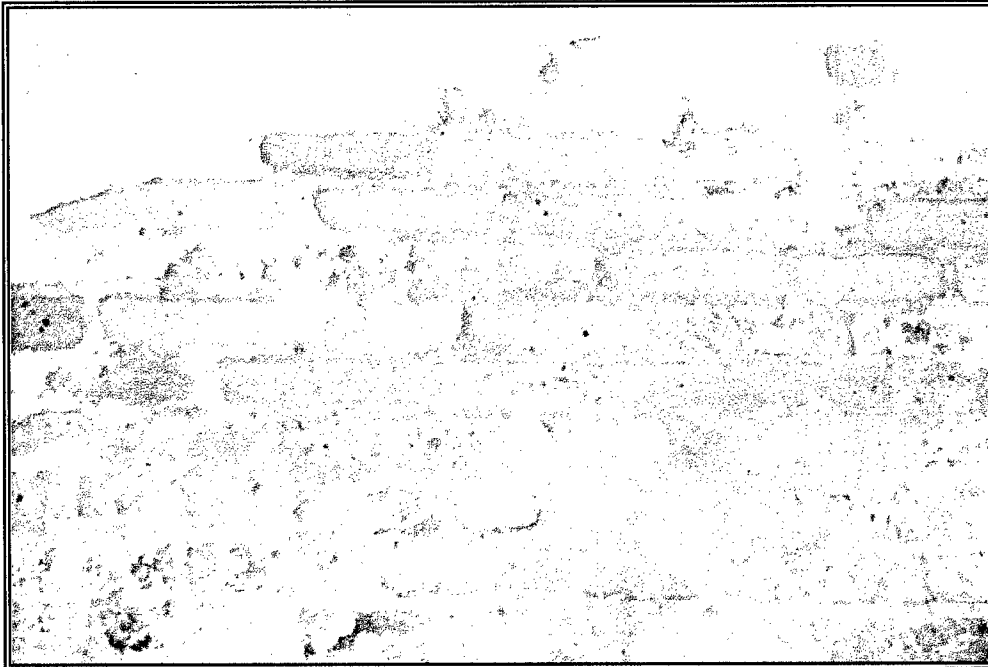


Figure 31. View of deteriorating brick on interior wall surface.

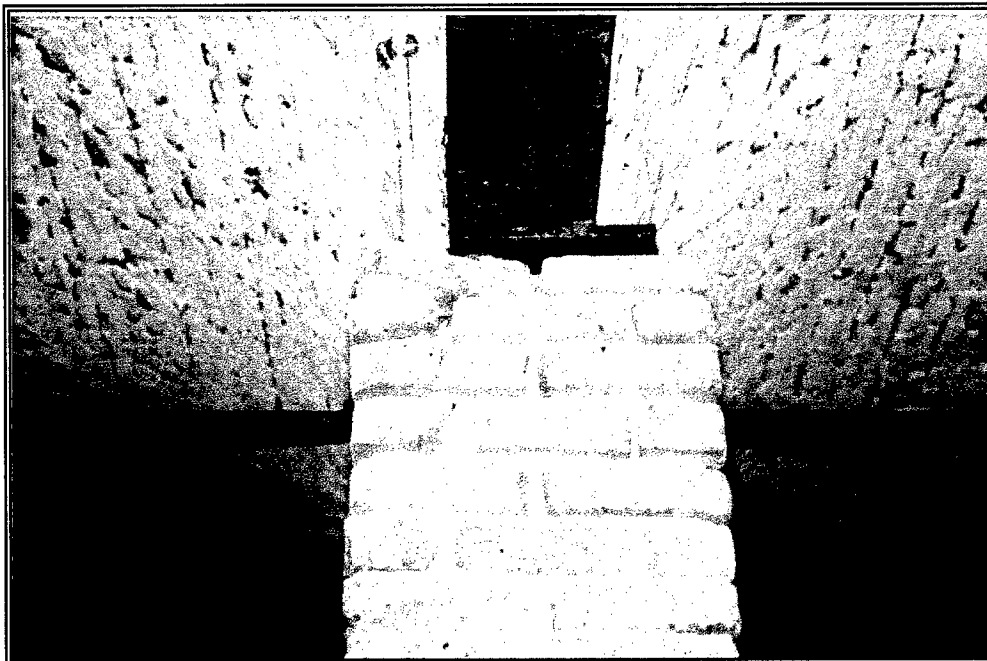


Figure 32. View of broken brick on top of southeast column.

- Leaving the wooden doors open to promote building ventilation allows access by various pests (e.g., cats, rats). Impermanent installation (e.g., friction-fit framing) of screening inside the iron bars and outside the existing wooden doors will allow continued ventilation while restricting access by pests.
- The removal of exterior brick paving and the damaged brick step has raised the entrance grade of the building and made access difficult.

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1817 Montgomery County Plat Book SG 5128:87. On microfilm, Alabama Department of Archives and History, Montgomery.

Montgomery County, Alabama Deed Books (MCDB)

- 1834 James J. Stewart purchased Lots 19 and 20 in Montgomery, located on the north side of Washington Street at McDonough Street, from Andrew Dexter, December 5th, 1834. MCDB Old Series H:112. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1854a James J. Stewart and Elizabeth A. Stewart sold one half undivided interest in a 14.3 acre tract (Lot No. 3 of the Stewart and Wharton tract) to William G. Wharton, July 7th, 1854. MCDB, Old Series 6:321. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1854b William G. Wharton and Elizabeth V. Wharton sold their one half undivided interest in Lot No. 2 of the Stewart and Wharton tract (13.59 acres) to James J. Stewart, July 13th, 1854. MCDB Old Series 6:484. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1861 William P. Ashley sold a 1.04 acre lot, the northwest corner of Lot No. 2 (recorded as 13.53 acres), to the State of Alabama, March 7th, 1861. MCDB 20:115. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1901a The State of Alabama sold the one acre tract, referred to as the Magazine Lot, to James Taylor Roberts, August 22nd, 1901. MCDB 49:273. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1901b James T. Roberts purchased a right of way to the Magazine Lot from the adjacent Peoples Cotton Factory, June 7th, 1901. MCDB 49:273. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1908 James T. and Katie S. Roberts sold one acre tract to I.O. Anderson (Anderson Sand and Gravel Company, September 16th, 1908. MCDB 70:420. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.

- 1916 Anderson Sand & Gravel Company sold the Magazine Lot (excluding building) to James Hodgson, April 10th, 1916. MCDB 96:268. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1973 Act No. 831, Acts of Alabama, Regular Session of 1973, the State of Alabama granted the powder magazine and immediately surrounding land to the City of Montgomery, November 7th, 1973. MCDB 215:53. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.
- 1975 City of Montgomery sold the Powder Magazine Tract (2.75 acres) to the United States of America, August 27th, 1975. MCDB 310:330-331. On microfiche, Montgomery County Probate Records and Recording, Montgomery County Courthouse Annex.

Montgomery County Marriage Books (MCMB)

- 1833 Marriage of James J. Stewart married Elizabeth Ann McWhorter, May 27th, 1833. Montgomery County Marriage Book D:70. On microfilm, Alabama Department of Archives and History, Montgomery.

National Historic Preservation Act (NHPA)

- 1966 Sections 106 and 110. 16 U.S.C. § 470.

Oakley, Carey B. and G. Michael Watson

- 1977 *Cultural Resources Inventory of the Jones Bluff Lake, Alabama River, Alabama*. Report of Investigations No. 4, Office of Archaeological Research, The University of Alabama, University, AL.

Office of Archaeological Services (OAS)

- n.d. Real Estate Division Records for Jones Bluff Lock and Dam, US Army Corps of Engineers, Mobile District, 1995.30.F219, Tract 937. On file, Office of Archaeological Services, University of Alabama Museums, Moundville, AL.
- 1975 Narrative Appraisal Report of the Powder Magazine, June 10th, 1975. Real Estate Division Records for Jones Bluff Lock and Dam, US Army Corps of Engineers, Mobile District, 1995.30.F219. On file.

The State Abstract Company

- 1899 *City of Montgomery, Alabama*. Map on file, Alabama Department of Archives and History, Montgomery, AL.

US Army Corps of Engineers (USACE)

- 1990 33 CFR Part 325, Processing of Department of the Army Permits, Appendix C: *Procedures for the Protection of Historic Properties*.

US Army Corps of Engineers (USACE, Alabama River Lakes)

- 1974 Disposition Form submitted by Robert M. Creswell (Resource Manager, USACE, SAMOP, FO-AR), November 27th, 1974. On file, Lowndesboro, AL.
- 1975 Letter from Melvin W. Dovith (USACE, Chief of Real Estate Division) to Jay Aronstein (Director of Department of Planning, City of Montgomery), September 4, 1975. On file, Lowndesboro, AL.
- 1976a Letter from Jim Robinson (Mayor of the City of Montgomery) to Colonel Drake Wilson (USACE, Mobile District Engineer), March 30th, 1976. On file, Lowndesboro, AL.
- 1976b Memo from Robert Creswell (Resource Manager, USACE, SAMOP, FO-AR), April 22nd, 1976. On file, Lowndesboro, AL.
- 1976c Letter from Robert M. Creswell (Resource Manager, USACE, SAMOP, FO-AR) to W.J. McFarland (Public Works Director for the City of Montgomery), August 26th, 1976. On file, Lowndesboro, AL.
- 1980a Memo from Robert M. Creswell (Resource Manager, USACE, SAMOP, FO-AR), July 7, 1980. On file, Lowndesboro, AL.
- 1980b Letter from Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) to Melvin W. Dovith (USACE, Real Estate Division), July 17, 1980. On file, Lowndesboro, AL.
- 1980c Letter from Melvin W. Dovith (USACE, Real Estate Division) to Mayor Emory Folmar (Montgomery), July 29, 1980. On file, Lowndesboro, AL.
- 1981a Disposition Form from Robert M. Creswell (USACE, Resource Manager), April 9, 1981. On file, Lowndesboro, AL.
- 1981b Letter from Robert M. Creswell (USACE, Resource Manager) to Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery), May 28, 1981. On file, Lowndesboro, AL.

- 1981c Letter from Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) to H.C. Weiss (USACE, Acting Chief, Real Estate Division), May 29, 1981.
- 1989 Memo from William R. Matkin (Chief, Management & Disposal Branch, Real Estate Division, USACE) to OP-R, August 23, 1989. On file, Lowndesboro, AL.
- n.d. Scope of Work for Roof Repair-Historic Powder Magazine Building, Powder Magazine Park, R.E. "Bob" Woodruff Lake. On file, Lowndesboro, AL.
- 1993 *Historic Properties Management Plan: R.E. "Bob" Woodruff Lake, Alabama River, Alabama*. Prepared by Environmental Resources Planning Section, Planning and Environmental Division and Natural Resources Management Branch, Operations Division. On file, Lowndesboro, AL.
- 1997 Letter from Curtis M. Flakes (Chief, Environment and Resources Branch, USACE) to F. Lawrence Oaks (Alabama State Historic Preservation Officer, Alabama Historic Commission), June 18, 1997. On file, Lowndesboro, AL.

US Army Corps of Engineers (USACE, Mobile)

- 1977a Letter from Robert M. Utley (Deputy Executive Director, ACHP) to Lawrence Green (Chief of the Planning Division, USACE, Mobile), July 13th, 1977. On file.
- 1977b Letter from Robert M. Utley (Deputy Executive Director, ACHP) to Lawrence Green (Chief, Planning Division, USACE, Mobile), July 27th, 1977. On file.
- 1977c Memo from Jerry Nielson (USACE, Mobile), August 31, 1977. On file.
- 1978a Memo from Jerry Nielson (USACE, Mobile), May 30, 1978. On file.
- 1978b Memo from Carl V. Kling Jr. (Architect, EN-DA), June 28, 1978. On file.
- 1979 Basil Dishongh, Jr. (President, Columbus [MS] Building and Supply Company, General Contractors) to Area Engineer (USACE, Fort McClellan), September 19, 1979. On file.
- 1980 Letter from Melvin W. Dovith (USACE, Chief, Real Estate Division) to Mayor of Montgomery, July 3, 1980. On file.

- 1989a Memo from Hugh McClellan (Chief, Environment and Resources Branch, USACE, Mobile) to Ernie Seckinger (PD-ER, USACE, Mobile), May 22, 1989. On file.
- 1989b Field inspection notes by Ernie Seckinger (PD-ER, USACE, Mobile), August 1, 1989. On file.
- 1989c Memo from Billy R. Thomas Sr. (EN-DA), August 8, 1989. On file.
- 1989d Proposal from Montgomery Roofing Co., Inc., December 11, 1989. On file.
- 1990 Memo from Ernie Seckinger (PD-ER, USACE, Mobile), February 6, 1990. On file.
- 1992 Updated Historic Property Site File for 1MT33 (Powder Magazine), originally prepared March 17, 1990 by Ernie Seckinger (PD-ER), March 14, 1992. On file.
- 1997 Historic Property Inspection form for Powder Magazine (1MT33) completed by John Bennett (USACE, Alabama River Lakes Office), May 5, 1997. On file.
- 1999 Letter from Hugh McClellan (Chief, Environment and Resources Branch, USACE) to Elizabeth Brown (Acting Alabama SHPO, Alabama Historical Commission), dated April 16, 1999; approved by signature on June 8, 1999. On file.

Wellge, Henry

- 1887 *Perspective Map of Montgomery, State Capital of Alabama*. Beck and Pauli, Lithographers, Milwaukee.

**Appendix A. Pre-Maintenance (1999) Plans and Elevations of
the Powder Magazine, by Architecture by
Acanthus (Durand D. Seay)**

Architectural



121 Barclay St.
Montgomery, AL 36102
Phone: 256-265-7775
Fax: 256-265-7776

DATE: 1999
BY: [Signature]

RESTORATIONS TO THE POWDER MAGAZINE BOAT RAMP PARK MONTGOMERY, ALABAMA

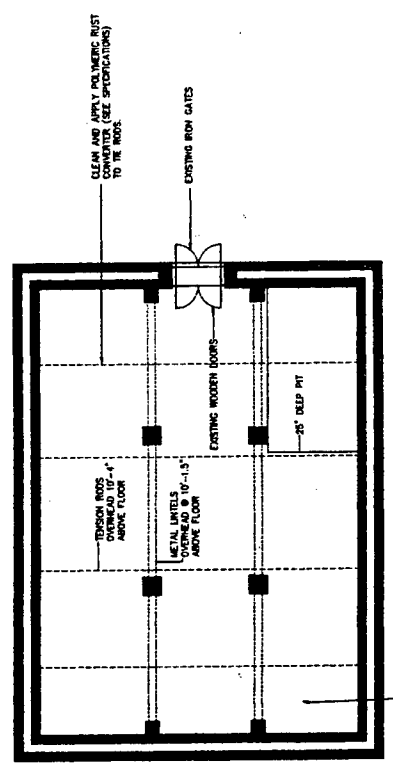
FLOOR PLAN

A2.1

TABLE OF CONTENTS

SHEET NUMBER	TITLE
A2.1	FLOOR PLAN
A4.1	ELEVATIONS
C.1	SITE EVOLUTION PLAN, SITE PLAN

NOTE:
BRICK TO BE REPLACED SHOULD BE IDENTIFIED
AND REPAIRED. BRICKS TO BE REPLACED
SHALL BE IDENTICAL TO EXISTING. BRICK
WALL THICKNESS IS PRESCRIBED AND SHALL BE
MAINTAINED. FOR ANY BRICK TO BE REMOVED THE
MAINTENANCE AND STRENGTH OF THE WALL MUST BE
MAINTAINED.
FOR REPAIRING OF MORTAR JOINTS, SEE
SPECIFICATIONS, ATTACHMENT 1, "HISTORICAL
MORTAR JOINTS". THIS SHALL APPLY TO ALL
REPAIRING.



NOTE:
REMOVE AND CLEAN OUT DIRT AND DEBRIS
ACCUMULATED ON THE FLOOR WITHIN THE
BUILDING. USE NO WATER OR CHEMICALS
BT

EXISTING WALK

EXISTING GATE

EXISTING WALK

EUROPE STREET

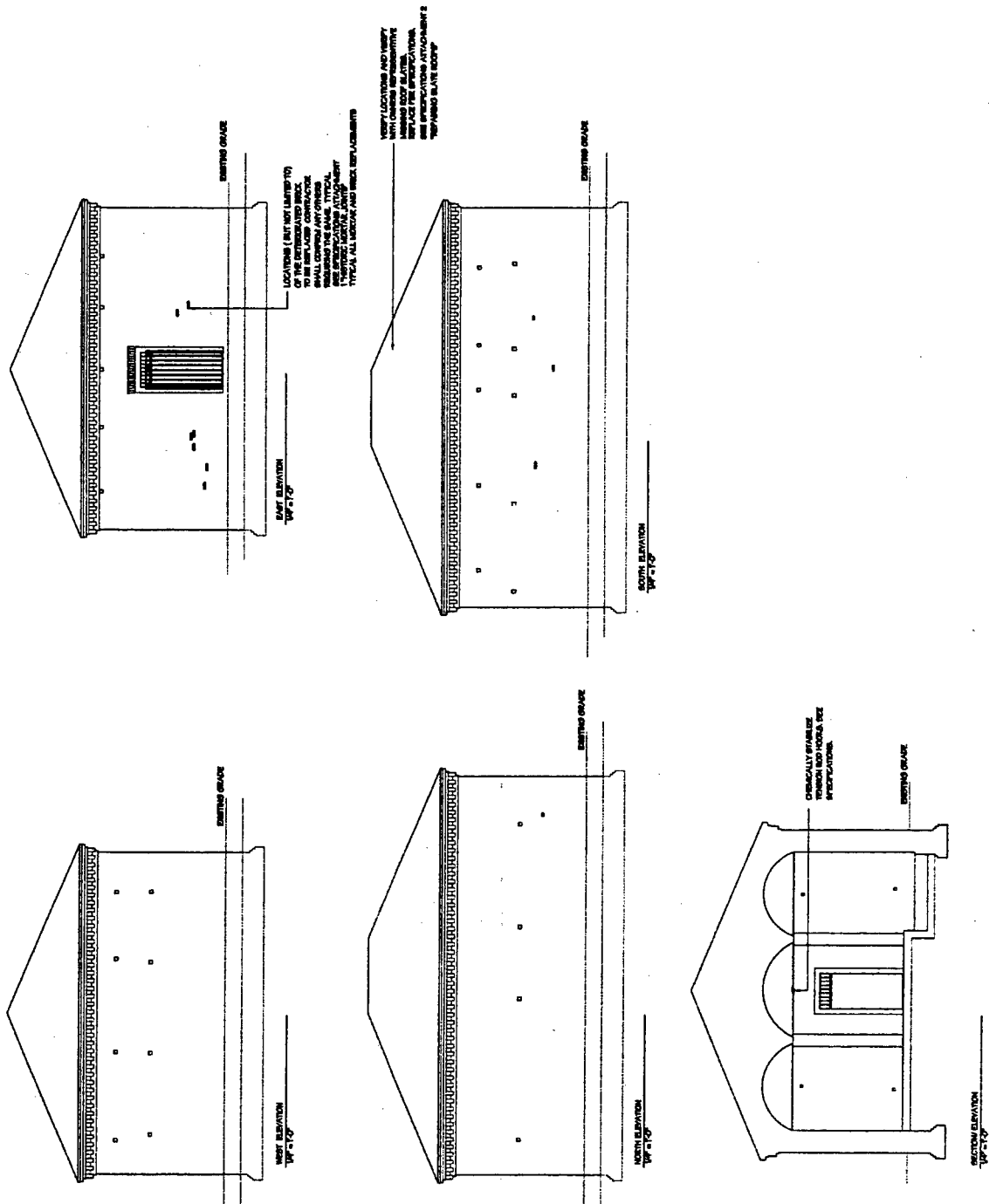
FLOOR PLAN
1/4" = 1'-0"

RESTORATIONS TO THE
POWDER MAGAZINE
BOAT RAMP PARK
MONTGOMERY, ALABAMA

Architecture By



**121 Hamrick St.
Montgomery, Al.
tel: 264-262-5700
fax: 264-262-5770**



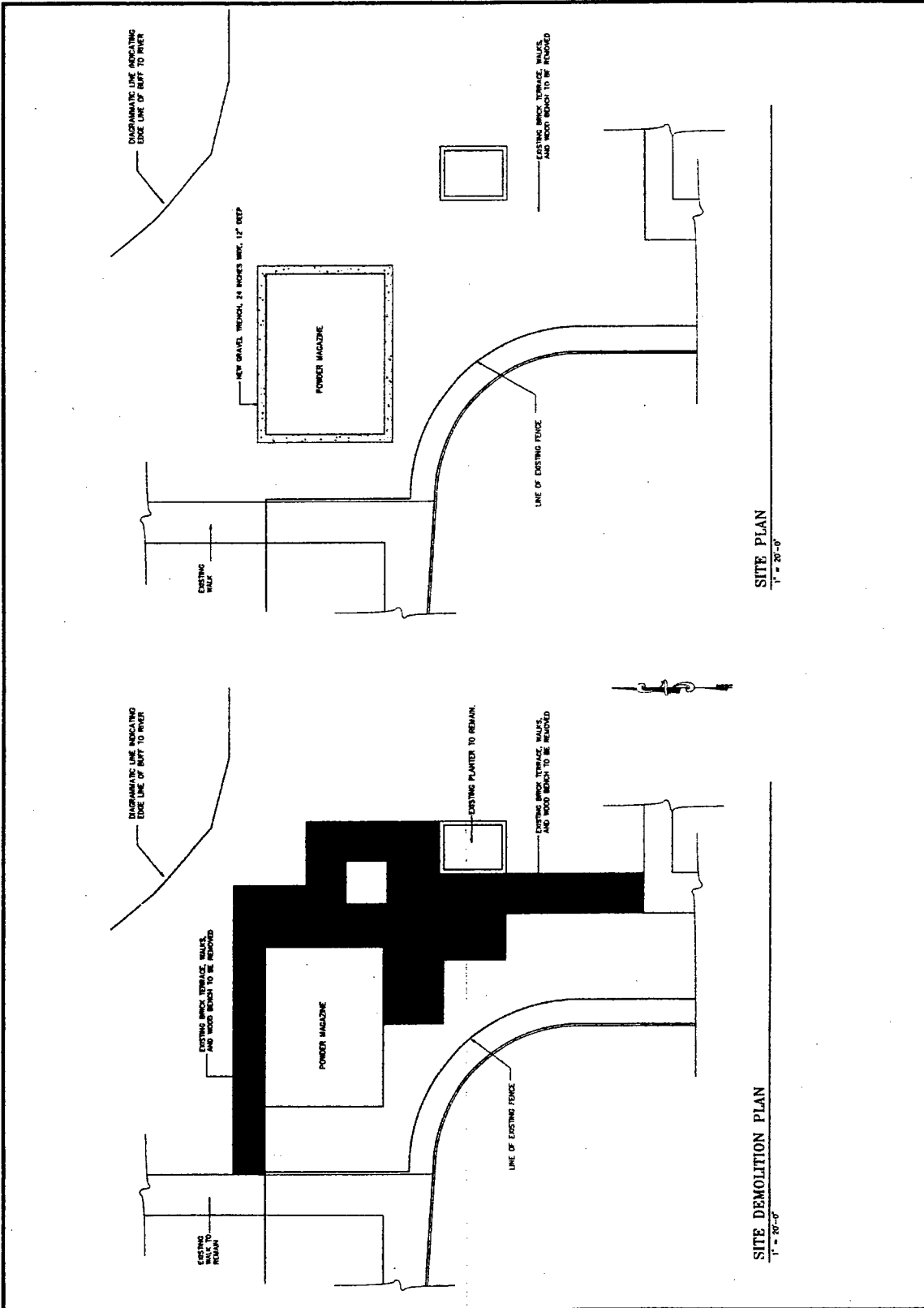
C.1

SITE DEMOLITION PLAN
SITE PLAN

RESTORATIONS TO THE
POWDER MAGAZINE
BOAT RAMP PARK
MONTGOMERY, ALABAMA

121 HARRICK ST.
MONTGOMERY, AL.
36101
205-264-8779

Architectural & Engineering



**Appendix B. Pre-Maintenance (1999) Photographs of the
Powder Magazine, by Architecture by Acanthus
(Durand D. Seay)**

The Powder Magazine, Montgomery, Alabama

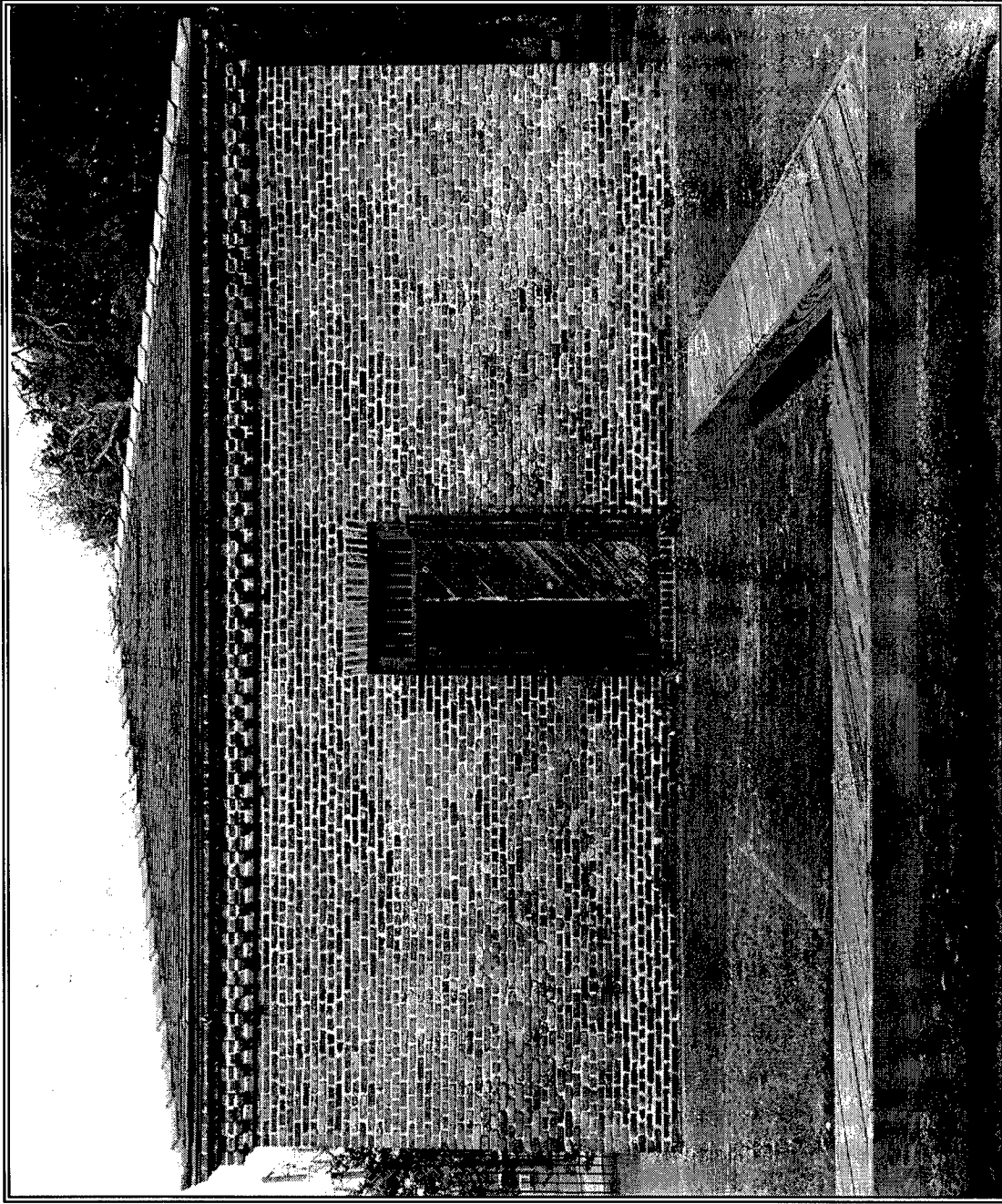


Plate 1. East side (front) of the Powder Magazine.



Plate 2. North side of the Powder Magazine.

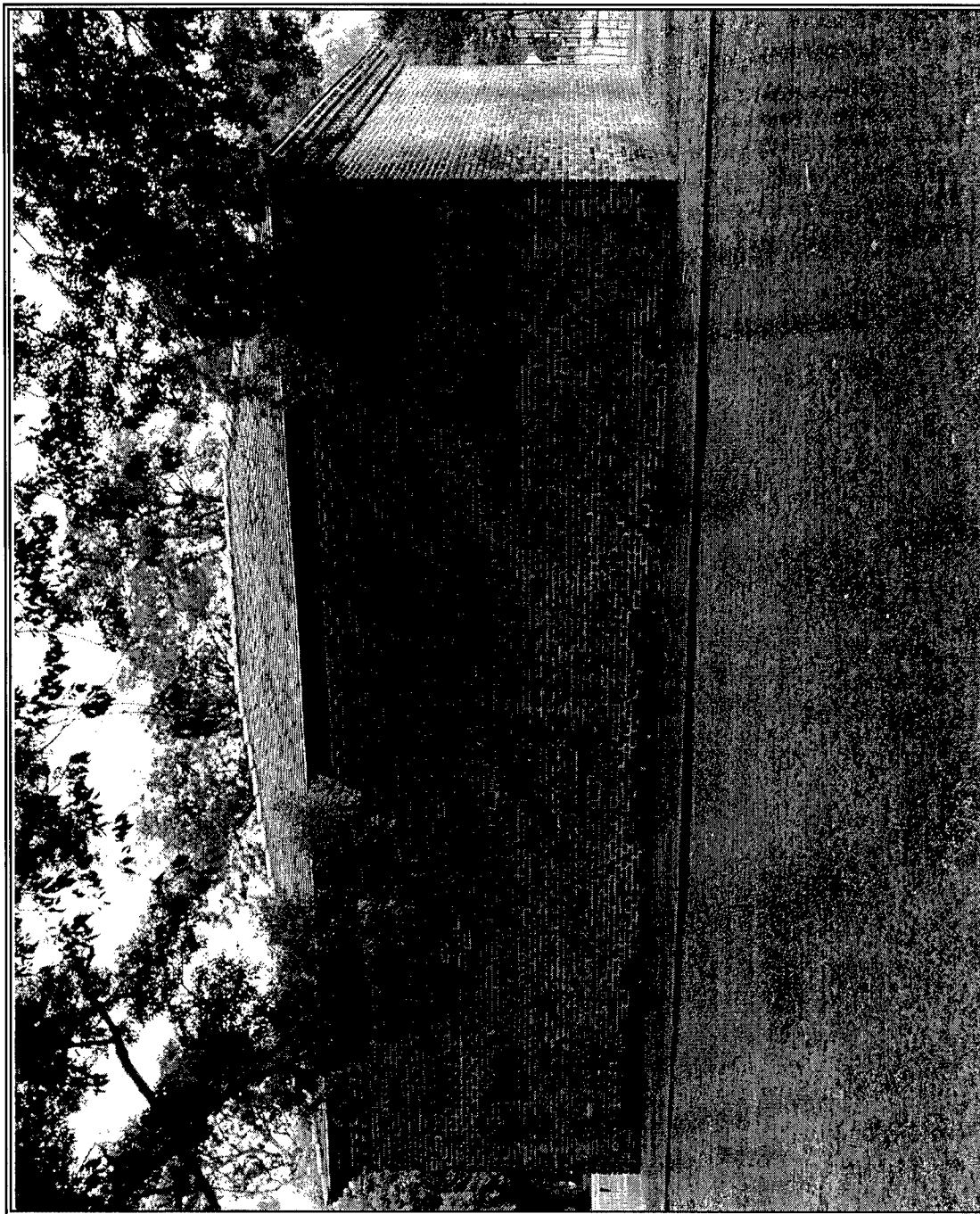


Plate 3. Northwest oblique of the Powder Magazine.

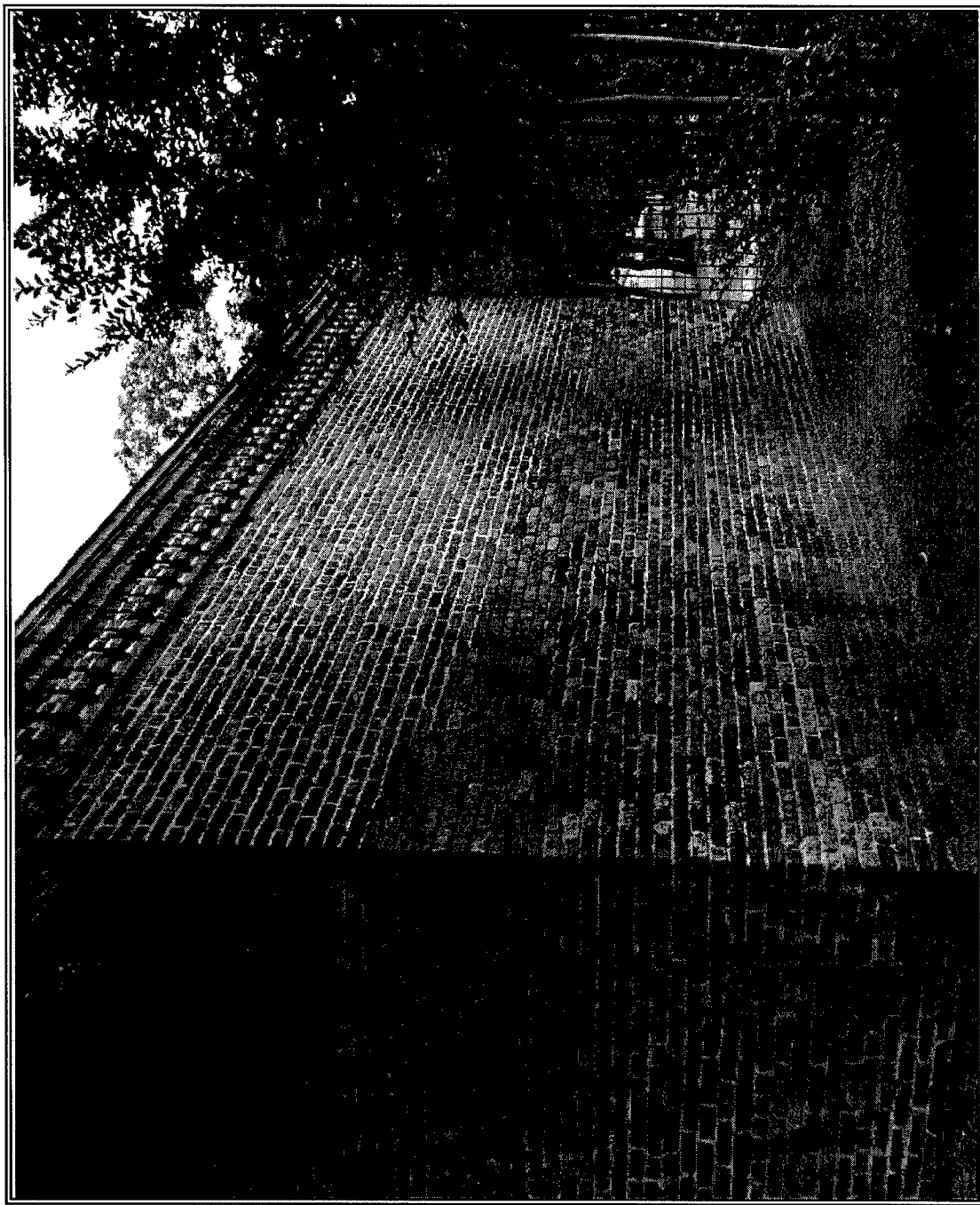


Plate 4. Northwest corner of the Powder Magazine.

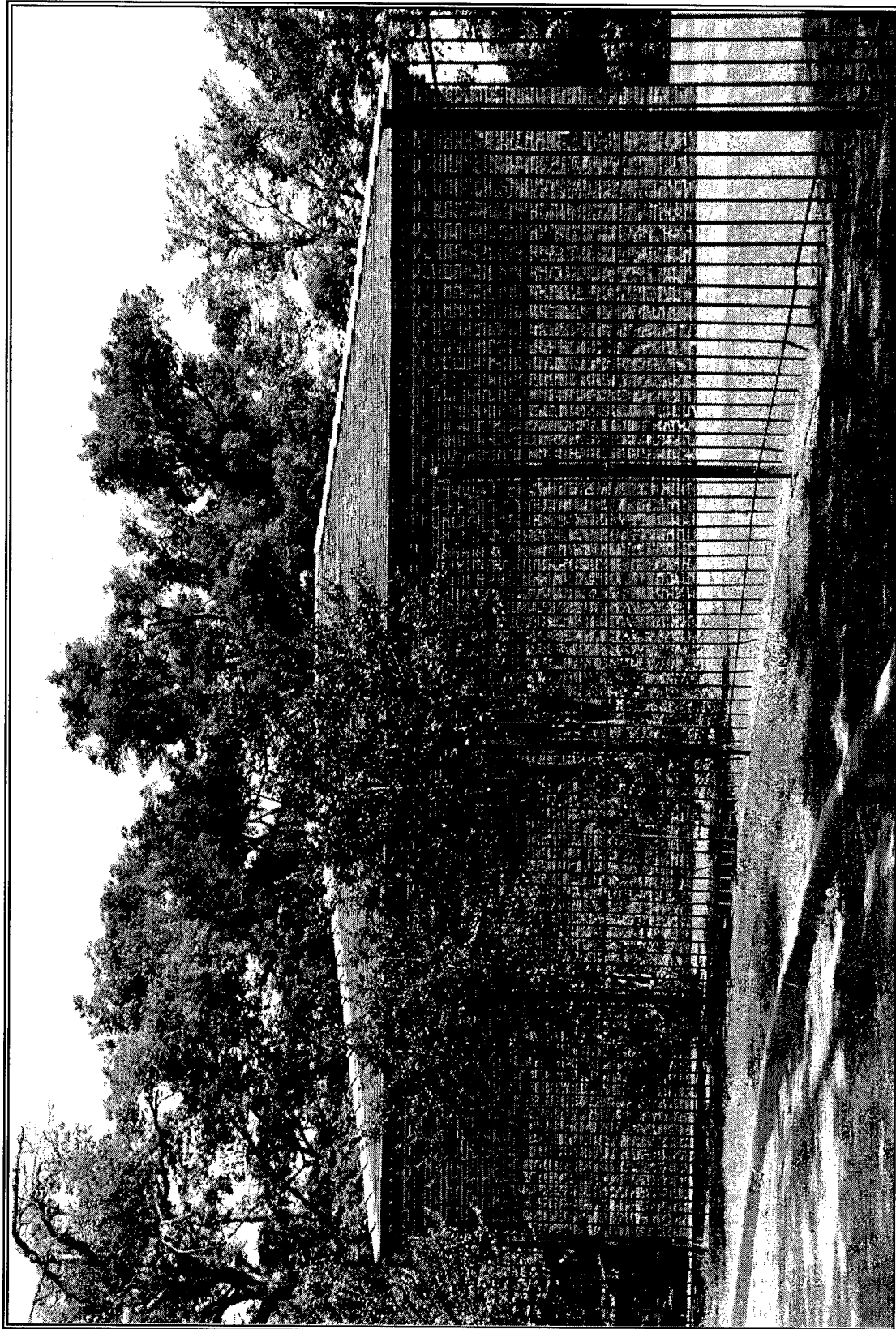


Plate 5. South side of the Powder Magazine.

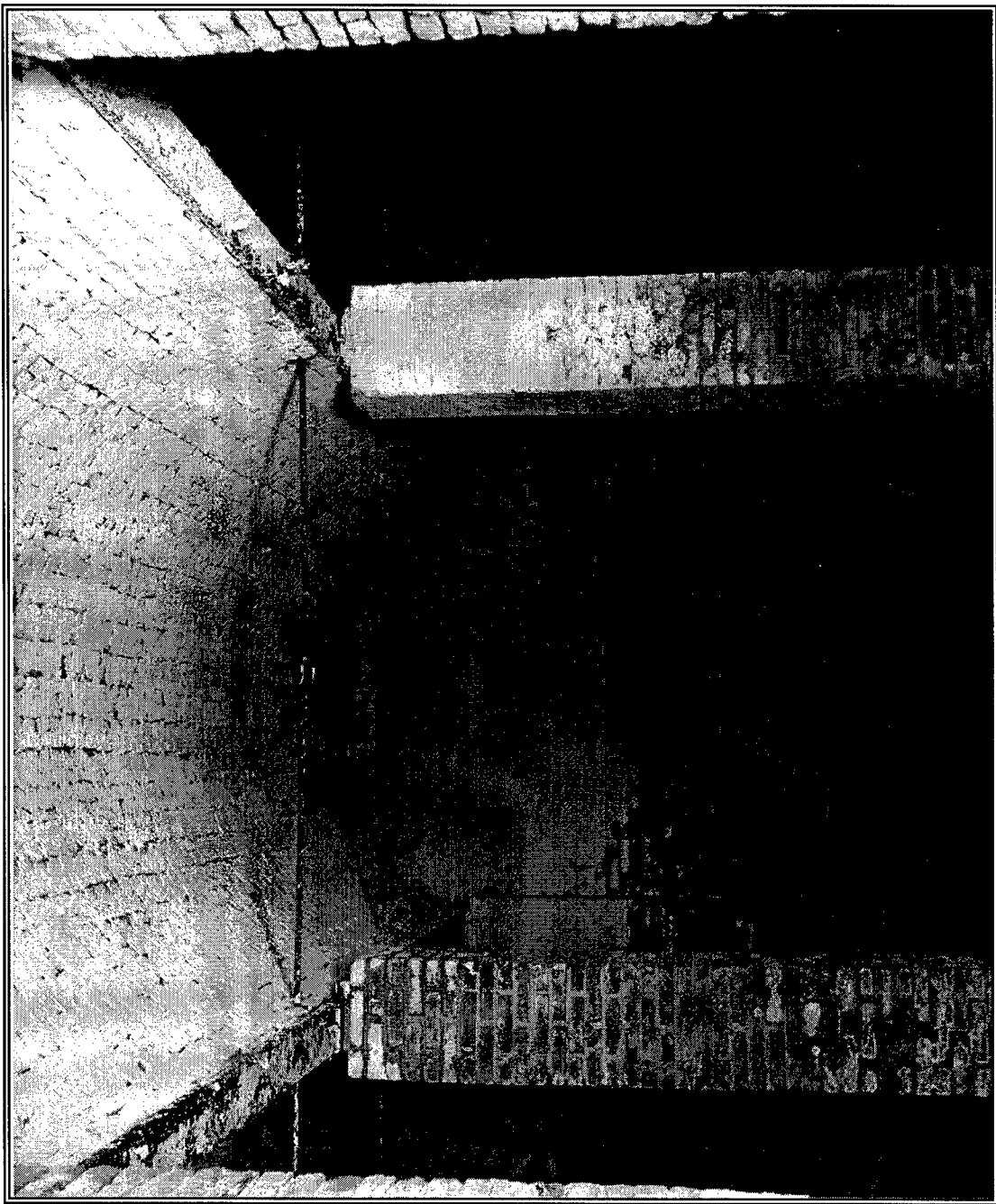


Plate 6. Interior (looking west) of the Powder Magazine.

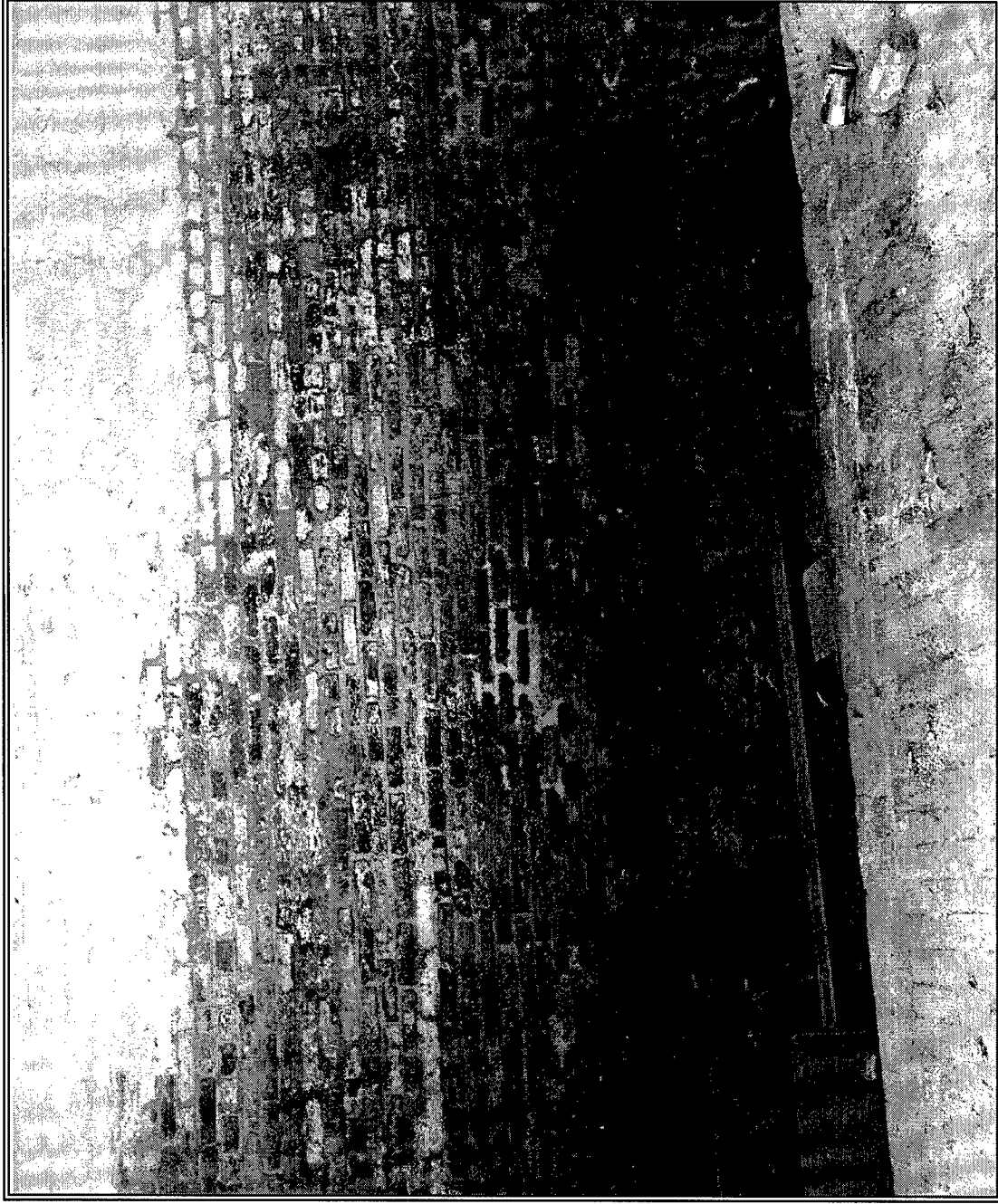


Plate 7. Interior along south wall of the Powder Magazine.

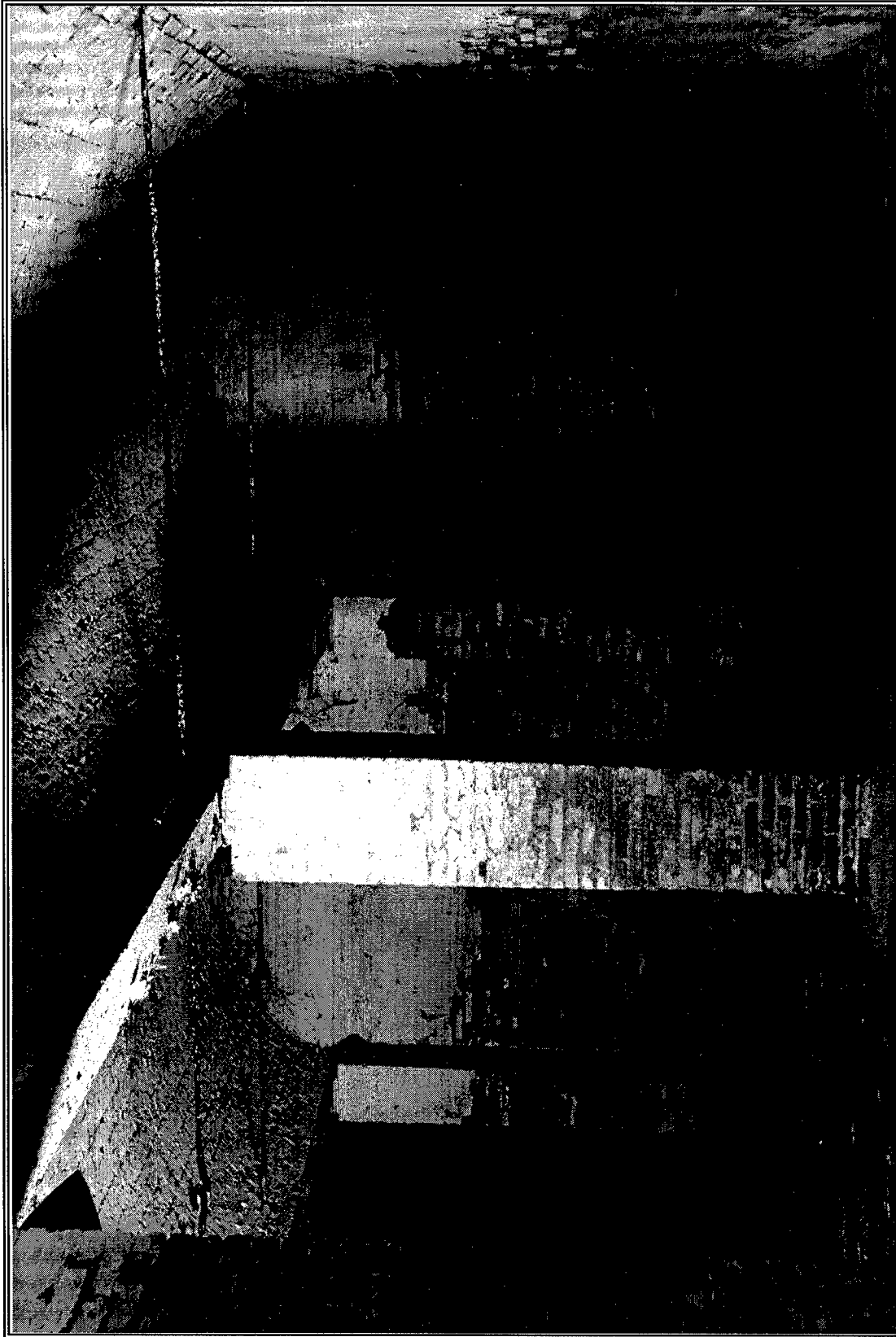


Plate 8. Interior (looking southwest) of the Powder Magazine.

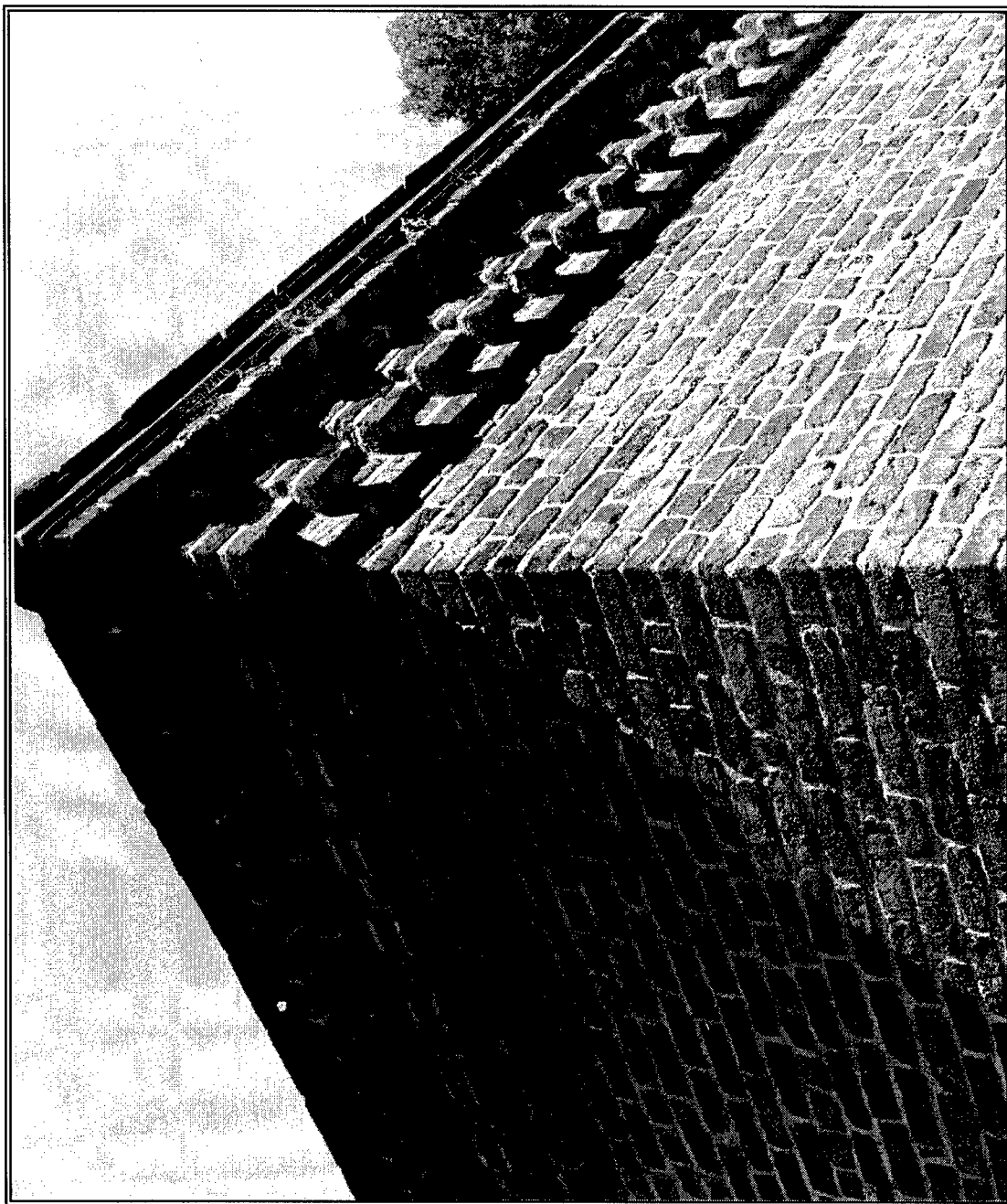


Plate 9. Southeast corner corbel detail of the Powder Magazine.

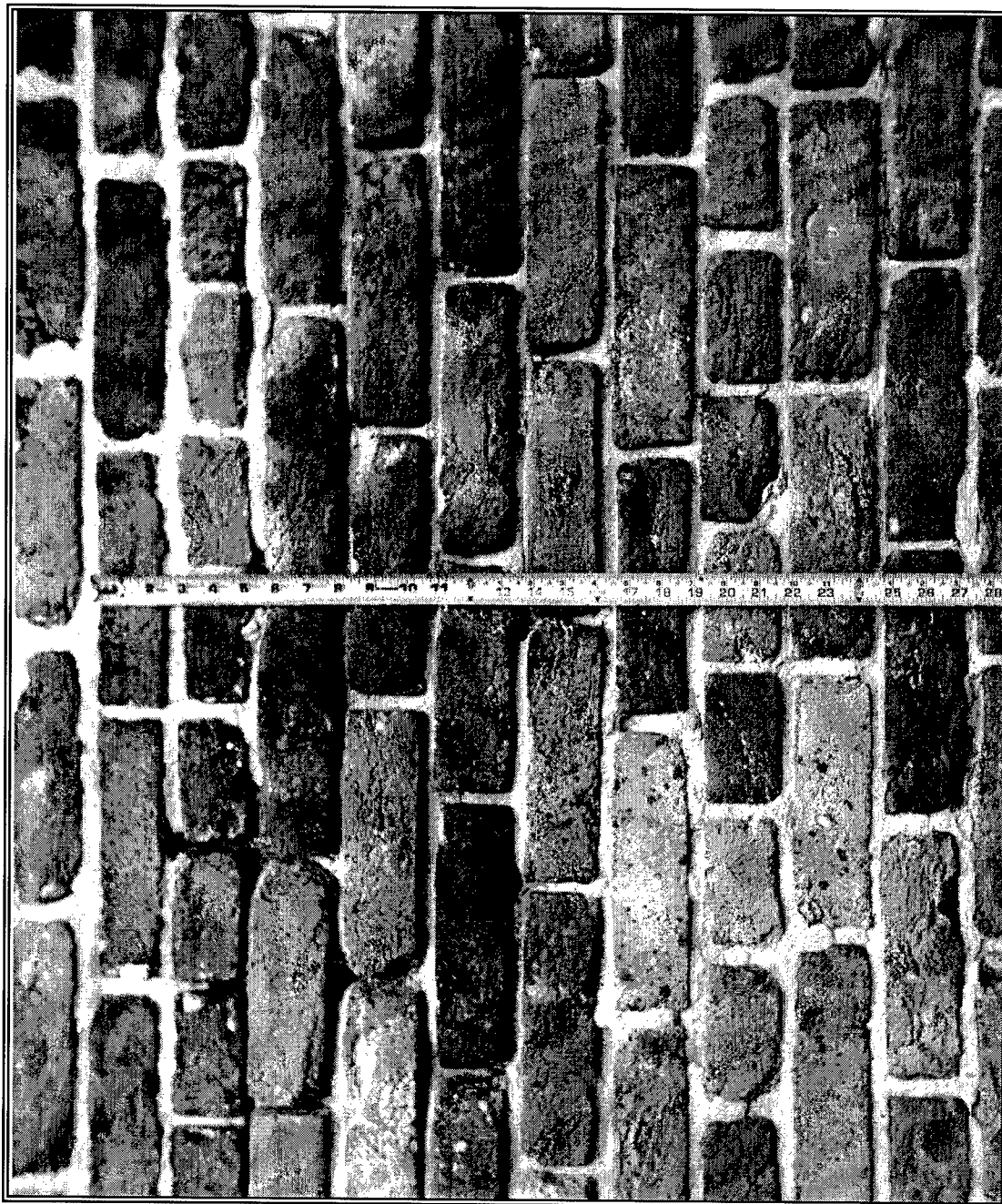


Plate 10. East wall brick detail of the Powder Magazine.

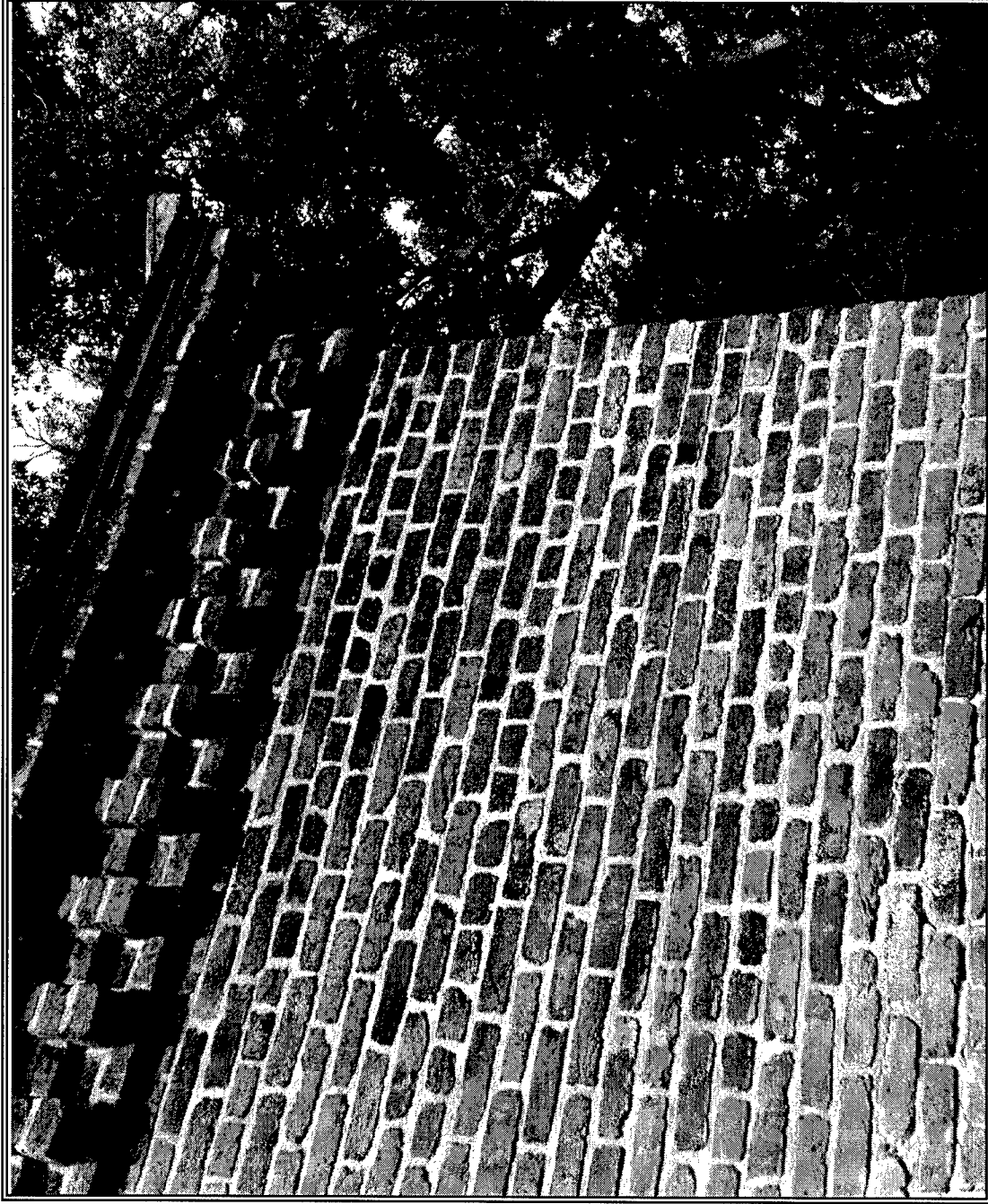


Plate 11. Northeast corner corbel detail of the Powder Magazine.

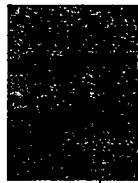
Appendix C. Drawings (1974) for Restoration of the Powder Magazine, by Tiller, Butner, Rosa, and Seay.

restoration of the POWDER MAGAZINE montgomery alabama

TO BE
REMOVED

TO BE
REMOVED

TO BE
REMOVED



P.P. TO BE
RELOCATED
AS DIRECTED

PRIVATE PROPERTY

UNDERGROUND
SERVICE

ELIZABETH ST.

SITE PLAN
SCALE 1/8" = 1'-0"

POWDER MAGAZINE
Montgomery, Alabama

TILLER, BUTNER, ROSA & SEAY
ARCHITECTS - ENGINEERS
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
MONTGOMERY, ALABAMA 36101

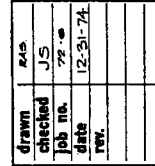


drawn JBL
checked JS
job no. 72-6
date 12-31-74
rev.

TITLE, INDEX,
SITE PLAN

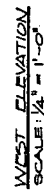
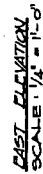
Sheet 1 of 6
Scale 1/8" = 1'-0"

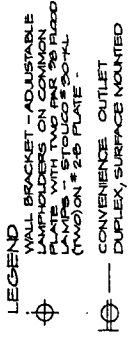
SHEET NO.	INDEX OF DRAWINGS
1	TITLE, INDEX, SITE PLAN
2	FLOOR PLAN
3	EAST & WEST ELEVATIONS
4	NORTH & SOUTH ELEVATIONS
5	BUILDING SECTION
6	DETAILS



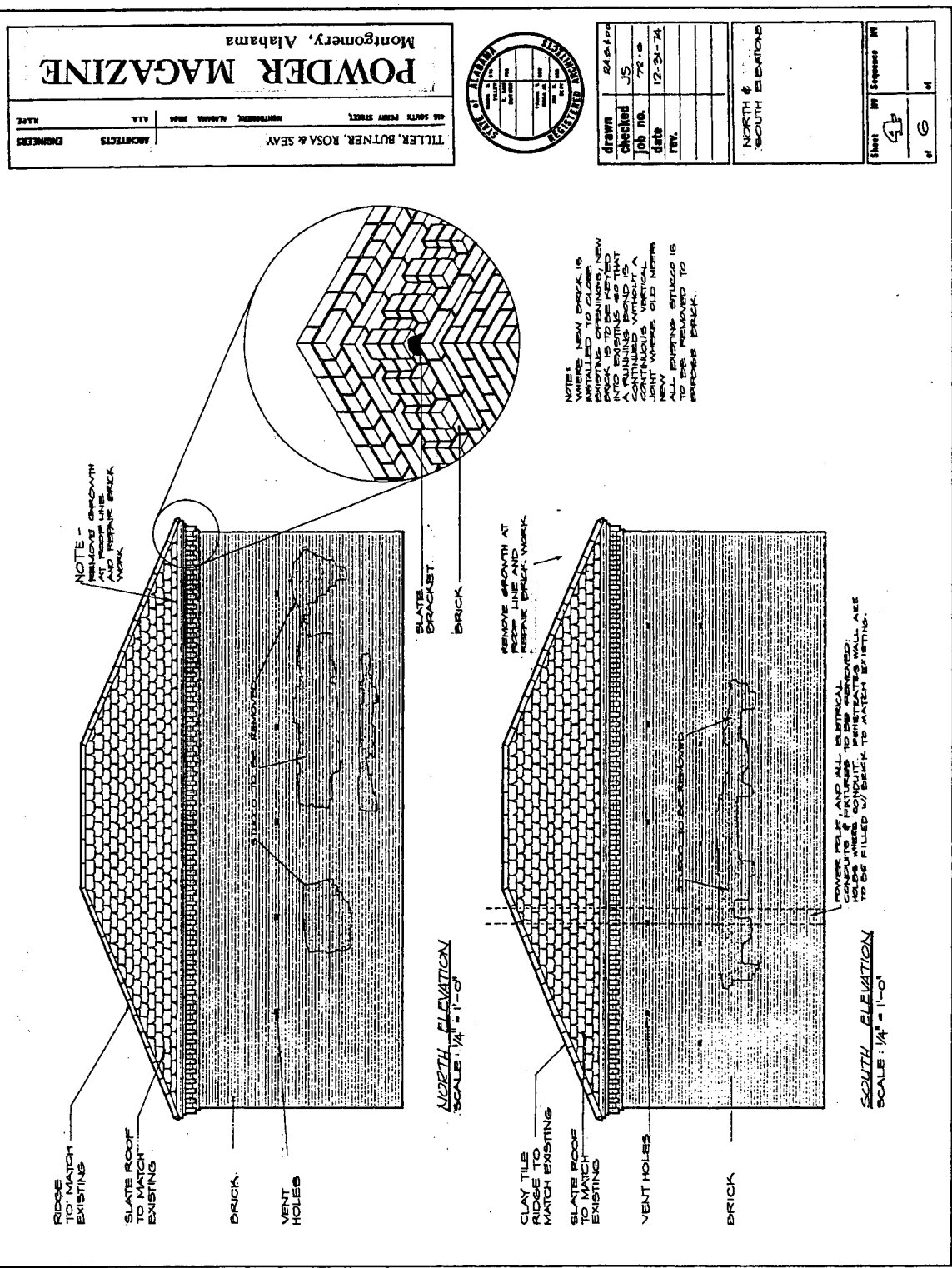
EAST & WEST ELEVATIONS	Sheet	MP	Sequence	MP
	33			

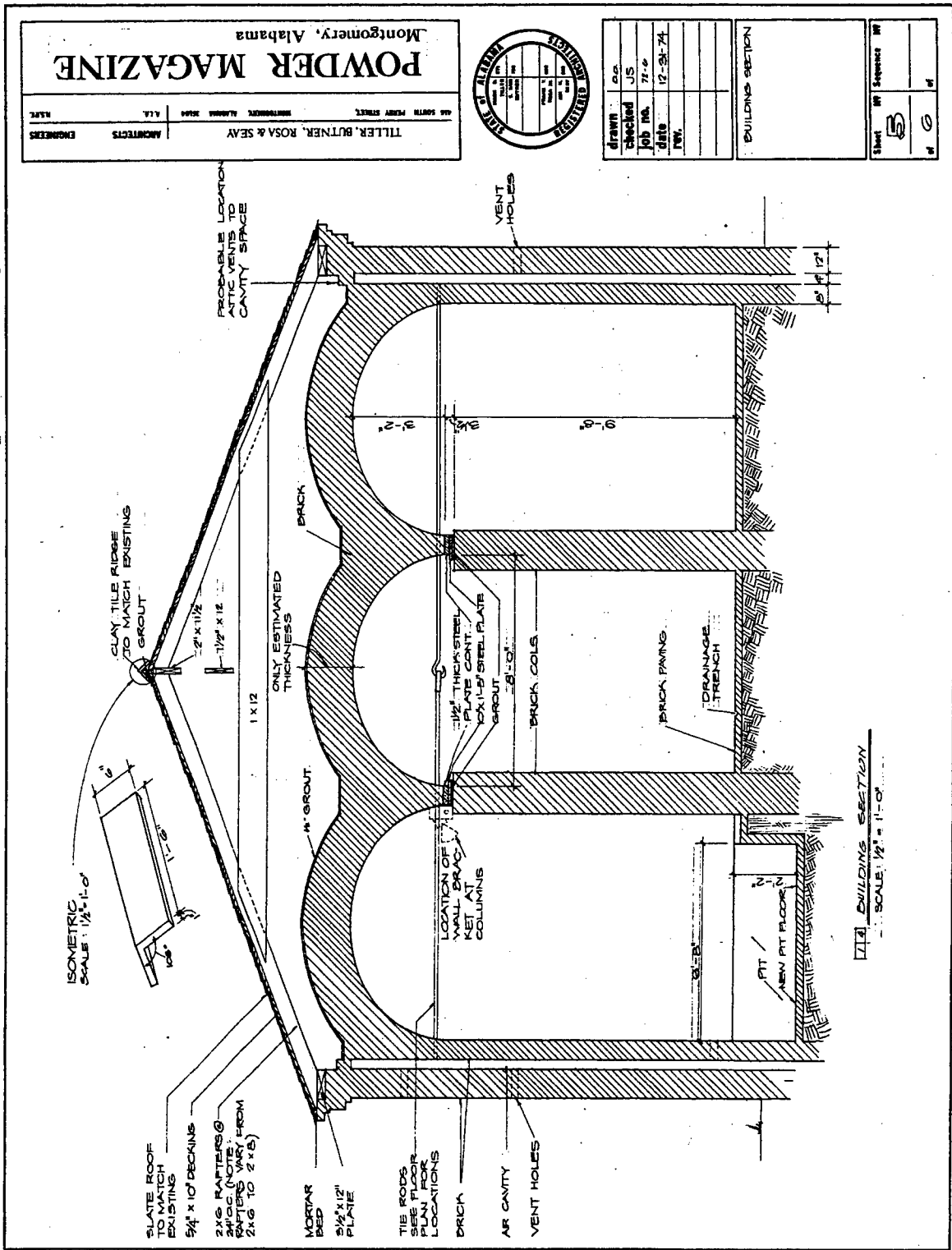
NOTE :
 REMOVE SLATE & STORE
 --REPLACE DETERIORATED ROOF
 DECK & FRAMING. REINSTALL SLATE
 REINSTALL SLATE REPLACING WITH
 NEW PIECES TO MATCH EXISTING
 BROKEN OR MISSING SECTIONS OF
 CLAY TILE ROOF TO BE REPLACED
 TO MATCH EXISTING.





NOTE: PATCH WORN AREAS OF BRICK FLOOR TO MATCH WHERE NEW BRICK IS INSTALLED IN WORN AREAS IN THE FLOOR. NEW BRICK IS TO BE LAYED IN THE SAME MANNER AS THE EXISTING BRICK SO THAT A RUNNING BOND IS CONTAINED WITHOUT A CONTINUOUS JOINT ALONG THE FLOOR. REMOVE OLD MORTAR FROM OLD WEARS. REMOVE ALL ELECTRICAL CONDUITS, FIXTURES AND PATCH WALLS AND CEILING.





POWDER MAGAZINE

Montgomery, Alabama

TILLER, BUTNER, ROSA & SEAY

ARCHITECTS ENGINEERS

44 NORTH PEERY STREET

MONTGOMERY, ALABAMA 36104

A.L.A.

DATE



drawn	OS
checked	JS
job no.	71-6
date	12-31-74
rev.	

BUILDING SECTION

Sheet	10	Sequence	10
#	6	#	4

[13] BUILDING SECTION
SCALE: 1/2" = 1'-0"

POWDER MAGAZINE

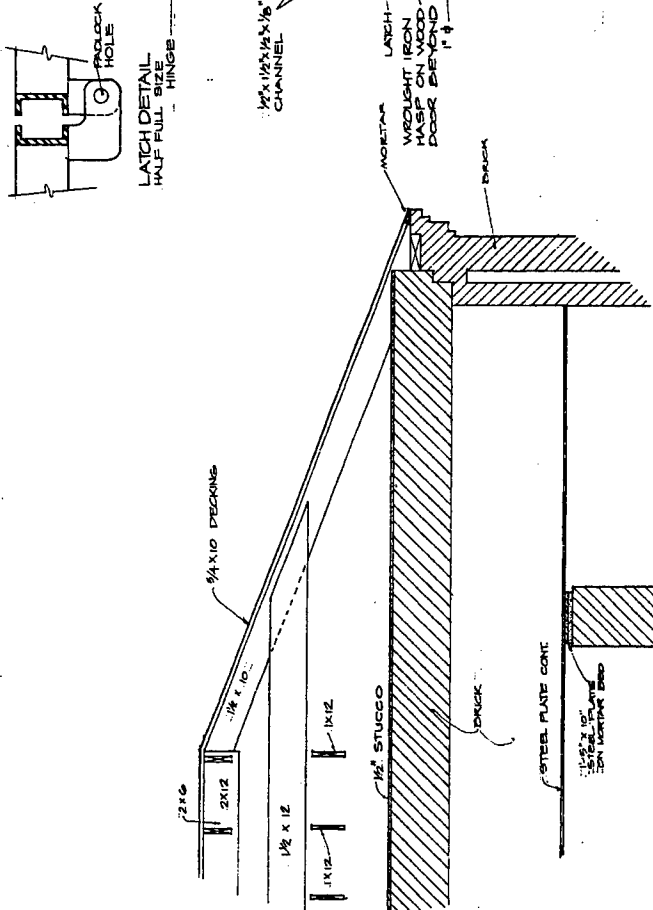
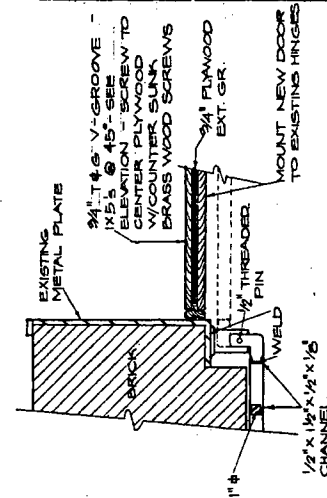
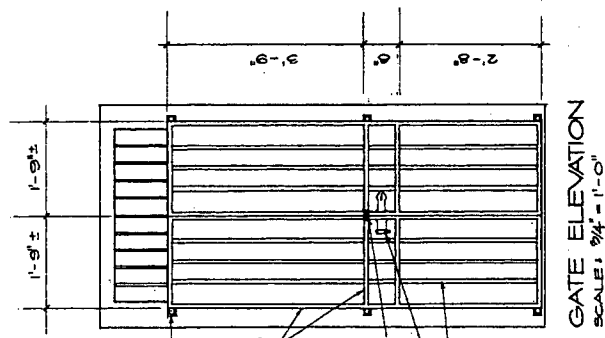
Montgomery, Alabama

TILLER, BUTNER, ROSA & SEAY
ARCHITECTS - ENGINEERS
MEMBER, AMERICAN INSTITUTE OF ARCHITECTS
MEMBER, SOCIETY OF PROFESSIONAL ENGINEERS
SOUTH MOUNT STREET
MONTGOMERY, ALABAMA 36102

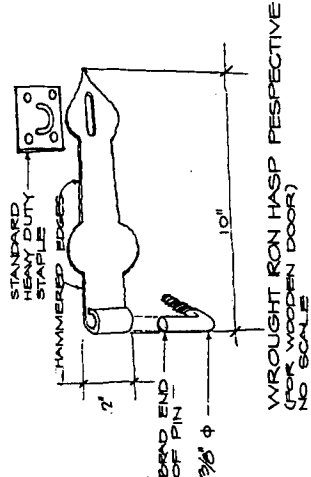


Drawn	J.S.M.
Checked	J.S.
By	72-G
Date	12-31-74
Project	TM
Sheet	6
Of	6
Sequence	00

DETAILS



SECTION AT TOP OF DOOR
SCALE: 1/2" = 1'-0"



**Appendix D. Annotated Records and Correspondence
Relevant to the Powder Magazine**

Montgomery (Alabama) Powder Magazine Recent History

1955-1958	First preservation efforts on Powder Magazine, conducted by Historic Montgomery Foundation under an agreement with the State Conservation Department. (Files of the Alabama Historic Commission [AHC])
pre-1960	Article in Sunday Montgomery newspaper on Powder Magazine (AHC)
January 29, 1968	Letter from Alex R. Garrett (City Clerk) to Mrs. A.B. Foster (attached to Historic Structure-Site Survey form). Rough history of Powder Magazine (Landmarks Foundation of Montgomery, Inc. at Old Alabama Town [LFM]).
February 8, 1973	Press Release: AHC announcement of Powder Magazine nomination for National Register of Historic Places. (AHC)
March 12, 1973	Letter from John Dudley Scruggs (Scruggs and Hammond, Inc., architects/planners) to W. Warner Floyd (Alabama Historical Commission). Scruggs writing report on Powder Magazine for the Corps of Engineers. Joe Clark (USACE) provided historical and architectural information. Clark is involved in design phase. (AHC)
April 13, 1973	National Register of Historic Places nomination form for Powder Magazine (form completed December 29, 1972). (AHC)
May 9, 1973	Press Release: AHC announcement of Powder Magazine acceptance for National Register of Historic Places. (AHC)
May 17, 1973	<i>Bessemer News</i> article "New historic site added to register." Announcing acceptance of Powder Magazine to NRHP. (AHC)
July 25, 1973	<i>Montgomery Advertiser</i> article "Commission Moves to Develop Historic City Park Area." Commission authorized purchase of two tracts, and initiated proceedings for acquisition of third. Site to be developed by the Army Corps of Engineers, after City acquires property and access routes, then transferred back to City (Parks and Recreation Department). Mayor Jim Robinson to sign agreement to purchase two parcels on Eugene Street from James T. Inscoc

(for \$40,000). Third tract owned by Harry and Ida Corbin (holding out for 4 times the appraised value). (AHC)

July 25, 1973

Montgomery Journal article "Harris To Introduce Powder Magazine Bill." Rep. James D. Harris Jr. (Montgomery) planned to sponsor a bill deeding the state-owned powder magazine to the City. Corps of Engineers to develop 60 acre park as part of Jones Bluff Dam Recreation Area project, after City completes condemnation of two lots on View Street. City "laid out \$60,000 for purchases, but owner of condemned land asked \$100,000 more than the appraised value. Park to be paid for from federal funds after lands are transferred to Corps of Engineers. Eugene and Gordon Streets declared historical districts and construction on these streets must be approved by the Architectural Review Board. (AHC)

August 23, 1973

Routing and transmittal slip from Robert M. Creswell (Resource Manager, USACE, FO-AR) to SAMOP, requesting "if the powder magazine site off Bell Street and near Maxwell Air Force Base in Montgomery has been acquired for potential development of public use area." Written response reads "The property in question has not been acquired yet but will be in the near future." (US Army Corps of Engineers [USACE])

February 22, 1974

Cover letter and contract from Jim Seay (Tiller Butner Rosa & Seay, Montgomery, Architects-Engineers). Contract for restoration of Powder Magazine (\$950) with Landmarks Foundation of Montgomery, Inc. For architectural drawings, structural drawings as needed, electrical drawings as needed, and specifications. (LFM)

September 24, 1974

Letter from Samuel H. Moore (Riverside Heights Residence Council) to W. Warner Floyd (Alabama Historical Commission). Thank-you for information regarding development of "park around the old powder magazine on the edge of this project [Riverside Heights]" (LFM)

November 27, 1974

Disposition Form from Robert M. Creswell (Resource Manager) to SAMOP-R asking if Powder Magazine Site has been acquired. Also notes that the site is becoming a refuse dump, possibly by Riverside Heights residents, and suggests that if the property is owned by the Government, site should be posted and maintained,

even though site will be developed by the City of Montgomery.
(USACE)

- December 13, 1974 Response to above from Kearney H. Windham (Assistant Chief, Recreation Resource Management Branch) states that tract next to Maxwell has been acquired but that Powder Magazine tract "has not been turned over to the Corps. The City of Montgomery has acquired title to the land and it will be turned over to the Corps within the next several months." (USACE)
- January 8, 1975 Newspaper article in *The Montgomery Advertiser* (p.3), City OKs Land Purchase, by Mike Hamilton describes process of city purchasing land for park along the river. A portion of the land had been deeded to the city by the State, but remaining two parcels had to be purchased (\$30,000) from other owners before USACE could conduct planning study. Powder Magazine to be rebuilt by Landmarks, Inc. Park development is to be totally with federal money. (USACE)
- June 10, 1975 Narrative Appraisal Report for Tract No. 937, Jones Bluff Lock and Dam Project, Montgomery, Alabama, by Donald T. Slay (Appraiser) certifying fair market value of tract as \$39,000. No monetary value placed on powder magazine. Best use for high ground (1.5 acres; \$25,000/acre) is low cost housing; low area and embankment (1.25 acres/\$1,200/acre) is unuseable. 700 feet frontage on Alabama River. Alabama Power Company transmission crosses area. High ground includes "old civil war powder magazine as well as five frame houses. . . The building has had little or no care and as might be expected it is in rather poor condition. . . The five frame houses are not occupied and have been badly vandalized." Includes site map. (USACE/OAS)
- First three comparables are for residences and property in subject area. Sale No. 1 - Jesse Speiger to S. Rip Marks, 11 Feb 1972; 144:964; \$8500;
Sale No. 2 - Charles Mulican to Elmore Inscoe, 15 May 1970; 89:426;
Sale No. 3 - Mildred Wilson, et al. To Jim T. Inscoe, 2 Sep 1970; 99:65. Provides tract description and late chain of title as Schedule A. (USACE/OAS)
- July 10, 1975 Letter from Samuel H. Moore (Riverside Heights Residence Council) to Alabama Historical Commission. Seeking information

concerning the proposed magazine park. Requested information on agency in charge of park after development. Want to operate a concession in the park. (LFM)

- July 23, 1975 Letter from Colonel Drake Wilson (District Engineer, US Army Corps of Engineers, Mobile District) to James L. Loeb (President, Landmarks Foundation of Montgomery, Inc.). Reference to recent conversation of Loeb and Colonel Robert E. Snetzer (Ret.) (Executive Vice President, Coosa-Alabama River Improvement Association, Inc.). Plans and specifications for development of Powder Magazine Access Area, Jones Bluff Lake sent to Division in Atlanta for review and approval. Construction scheduled for fall 1975. (LFM)
- July 25, 1975 Letter from W. Warner Floyd (Alabama Historical Commission) to Samuel H. Moore (Riverside Heights Residence Council). Referring Moore's letter regarding the Powder Magazine to James Loeb (President, Landmarks Foundation of Montgomery, Inc.). Foundation handling planning of magazine restoration. (LFM)
- July 29, 1975 Review Statement of Narrative Appraisal Report for Tract No. 937 (dated June 10, 1975; see above) from Charles A. Olts (Chief, Appraisal Branch, Real Estate Division) accepting appraisal amount of \$39,000 (USACE/OAS)
- August 12, 1975 Letter from E.J. Barter (Chief, Acquisition Branch, Real Estate Division) to Larry Watts (Department of Planning and Development, City of Montgomery) transmitting copies deeds and closing statements for Tract Nos. 937 and 939. Deeds to be executed by Jim Robinson and the City Clerk. Requests that the Clerk also sign closing sheets and that the deed and closing sheet for Tract 938 be executed by the Housing Authority of the City of Montgomery. (USACE/OAS)
- August 27, 1975 Deed of sale for 2.75 acre Tract No. 937 from City of Montgomery to United States of America (Montgomery County Deed Book 310:330-331). (USACE)
- September 4, 1975 Letter from Melvin W. Dovith (USACE, Chief of Real Estate Division) to Jay Aronstein, Director of Department of Planning, City of Montgomery, referencing September 3 phone conversation. Notice that Corps will "outgrant the Powder Magazine Area of the Jones Bluff Project to the City of Montgomery for management

and maintenance of the area as a park." Initial development to be completed by Fall of 1977. This will be a long-term lease arrangement. Lease for Public Park and Recreational Purposes form enclosed. References drafts of executed deeds for Tracts 937, 938, and 939 sent by Corps to Montgomery on August 12. (USACE)

- February 5, 1976 Letter from W. Warner Floyd (Alabama Historical Commission) to John F. Vaughn (Director, Landmarks Foundation of Montgomery, Inc.). Notice that Powder Magazine was accepted to the NRHP. Notification to officials suggesting "that a public ceremony be set up" for presentation of certificate. Notes fire at AHC in November 1973 which destroyed NRHP records. (LFM)
- March 18, 1976 Record of telephone call from Frederick Rux (calling for Willis Ruland) to Marvin Whitley (USACE SAMFO-AR) requesting that Corps take Polaroid photos of the flood area of the Powder Magazine, noting dates and time. This information is required to determine the water elevation and to make recommendations for development of the park. (USACE)
- March 30, 1976 Letter from Jim Robinson (Mayor of the City of Montgomery) to Colonel Drake Wilson (USACE, District Engineer) confirming recreational development plans for the Powder Magazine site. Two part plan: upper portion includes restoration of the Powder Magazine and construction of an overlook with toilets and parking; and lower portion with boat launch, picnic area, portable toilets, access road, and parking. Noted concerns with flooding, specific in lower portion, and resultant higher- than-normal maintenance costs to City. Offered city help in all development activities. (USACE)
- April 22, 1976 Memo from Robert M. Creswell (USACE, SAMOP, FO-AR). Government received latest segment sheets showing acquisition of tracts 937, 938, and 939. Acquisition included purchase of several poorly maintained houses on View Street and Eugene Street. Ranger Keith and an unnamed Resource Manager inspected the houses, including a cottage in danger of falling into the river, and evidence of ongoing trash dumping. They noted that the Powder Magazine was "open to vandalism and a fire has been built in it recently." They recommended disposing of dwellings as soon as possible and taking steps to discourage illegal dumping on the river bank. Response from Kearney H. Windham (Assistant Chief,

Recreation Resource Management Branch) on April 22 referring disposal of buildings to SAMRE and ordering Resource Manager to take necessary steps to stop dumping. (USACE)

April 30, 1976 Record of telephone call from Ed Barter (USACE, SAMRE) to R.M. Creswell (USACE, Alabama River Lakes) noting that Real Estate has been delaying purchase of Powder Magazine property "until it is certain that the Corps can develop the site." Notes that the six houses in the proposed development area have not been purchased. States that Tracts 939-938, and 939 have not been purchased. The only tract already acquired was purchased from the Union Bank and Trust Company (Montgomery) as Executor and Trustee. (USACE)

July 22, 1976 Department of the Army Certificate of Inspection and Possession, completed by Walter S. Patton (Closing Attorney) for Tract No. 937, containing 2.75 acres, "in connection with the Jones Bluff Lock and Dam. (USACE/OAS)

August 19, 1976 Record of telephone conversation from Don Graham (USACE, MDO EN-O) to Marvin Whitley (USACE SAMFO-AR) noting that they were no longer considering the floating courtesy dock at the boat ramp. They were planning to use a fixed pier with different levels (sketch map included). Graham wanted to know how high to build it and if he could use precast concrete. Whitley told him that few people were on the river at high water and he preferred wood decking for maintenance purposes. (USACE)

August 26, 1976 Letter from Robert M. Creswell (USACE, Resource Manager) to W.J. McFarland (Public Works Director, City of Montgomery) thanking City of Montgomery employees for cleaning up trash dump at the Powder Magazine. Noted placement of signs announcing construction of the park, repairing fence, and installing guard posts and signs. Noted that James A. Dees (USACE, Construction Division) had made preliminary inspections prior to awarding contracts. (USACE)

May 2, 1977 Letter from Lawrence R. Green (Chief, Planning Division, USACE, Mobile) to ?? (Advisory Council on Historic Preservation [ACHP]). Determination of no adverse effect to the Powder Magazine (from proposed rehabilitation. (Referenced in letter below). (USACE)

June 1977 *Report Cultural Resources Inventory of the Jones Bluff Lake, Alabama River, Alabama*, by Carey B. Oakley and G. Michael Watson. Records Powder Magazine site (1MT33) in 58-acre Powder Magazine Access Area. Cites Blue et al. (1878:5) in providing 1840 construction date, "barrel vaulted roof originally conceived by the French architect Vaudan." First used as a commercial building, later became a storage place for powder and munitions for the Confederate States Army during the Civil War. Sound structure, but not maintained and dilapidated. Also notes Woodland site component, possibly buried under terrace fill. (USACE)

July 13, 1977 Letter from Robert M. Utley (Deputy Executive Director, Advisory Council on Historic Preservation [ACHP]) to Lawrence Green (Chief, Planning Division, USACE, Mobile). Agreement on determination of no adverse effect, under the following conditions: USACE to consult with Interagency Historic Architectural Services (NPS) regarding preferred method for cleaning brickwork; and USACE to test samples of the brickwork for potential damage prior to cleaning building. Letter returned with USACE concurrence on July 22. (USACE)

July 27, 1977 Letter from Robert M. Utley (Deputy Executive Director, ACHP) to Lawrence Green (Chief, Planning Division, USACE, Mobile). Acceptance of USACE concurrence and agreement not to object to determination of no adverse effect. (USACE)

August 31, 1977 Memo from Jerry Nielson (USACE, Mobile) regarding discussions of rehabilitation of Powder Magazine, in accordance with the Memorandum of Agreement (MOA) with the ACHP. Ms Ann Grimmer (Technical Preservation Services Division, Office of Archaeology and Historic Preservation, National Park Service, Washington, D.C.) noted and requested information on: Is exterior stucco original? Does interior need cleaning? Prefer not to coat with silicone. Make sure mortar for repointing conforms to preservation brief. Wants photos of four sides of building. (USACE)

January 26, 1978 Letter from F.W. Aldridge (Supervisor, Division of Environmental Health, Montgomery County Health Department) to Robert M. Creswell (USACE) regarding drainage of sewage from two Corps construction trailers onto the ground and to the river bank. Ordered

Corps to make connection to public sanitary sewer in accordance with the Plumbing Code. (USACE)

- January 30, 1978 Letter from Robert Creswell (USACE, Resource Manager) to F.W. Aldridge (Supervisor, Division of Environmental Health, Montgomery County Health Department) responding to letter above. Creswell described development at the Powder Magazine and told Aldridge that trailers were property of construction contractor, Columbus Building & Supply Company, Columbus, Mississippi. They were working under the direction of the USACE Construction Division, James A. Dees, office at Maxwell Air Force Base. Creswell told Dees to contact Aldridge immediately. (USACE)
- March 26, 1978 *Montgomery Advertiser/Alabama Journal* article "Powder magazine restoration among restoration projects." Mobile District Corps expects restoration of "old Confederate Powder Magazine to be complete by mid-May 1979." Part of Alabama River projects, including recreational facilities at Fort Toulouse. The Corps awarded a \$845,000 contract to an unnamed Columbus, Mississippi firm in October 1977, for development of Powder Magazine Park. Park development included construction of a pavilion, walkways, and picnic tables, as well as landscaping 58 acres. According to James Dees of the Montgomery Corps office, work had been delayed by bad weather, but was to begin in the spring. Article included brief historical statement (magazine used by downtown merchants to store gunpowder during the Civil War. Powder removed in April 1865 by Confederate troops before Union General James H. Wilson marched into the city.) (Montgomery City County Library)
- May 30, 1978 Memo from Jerry Nielson (USACE, Mobile) regarding May 19 inspection for Powder Magazine rehabilitation. On-site attendees included: Milo B. Howard (Alabama State Historic Preservation Officer), James Loeb (former President, Landmarks Foundation of Montgomery), Johnny Brooks (Alabama Historical Commission), J.J. Page (CO-SC), Jim Dees (CO-FM), Don Graham (EN-O), Carl Kling (EN-DA), Jerry Nielson (PD-E), Jim Humphries (Contractor Representative). Points agreed upon included: steam cleaning of exterior, initially monitored by Carl Kling; careful hand-removal of stucco patches; no whitewashing (despite inclusion in specifications); interior cleaning to expose possible patching; retain plywood roof decking, but cover with slate; hiring of brick mason

for brick replacing and repointing to be discussed by Mr. Howard and Mr. Loeb; on-site meeting after interior and exterior cleaning has been accomplished. (USACE)

June 28, 1978

Memo from Carl V. Kling Jr. (Architect, EN-DA) regarding June 15 inspection of brick cleaning at Powder Magazine. On-site meeting attended by Gill Dishongh, Jr. (Contractor), ___ Bradford (Job Superintendent) Jim Dees (CO-FM), Carl Kling (EN-DA), and Milo B. Howard (Alabama State Historic Preservation Officer). Steam cleaning ineffective but not damaging on upper portion of building. Steam cleaning removed efflorescence (from lime patching mortar and previous stucco wainscot) on patching bricks. Patching bricks do not match, but tolerable; patching mortar does not match, and is disturbing. Kling and Howard recommended cutting back and tuck pointing all exterior mortar joints. Reference to confusion in specifications regarding brickwork restoration (e.g., percent of remortaring). Kling recommended change order to cover cutting back and repointing 100 percent of the exterior. (USACE)

December 21, 1978

Letter from James L. Loeb (President, Landmarks Foundation of Montgomery, Inc.) to Milo Howard and John Vaughn. Discussion of ideas for interpretation at Powder Magazine, requested by Jimmy Brown (City of Montgomery). Ideas included: installation of plate glass in the entrance, with iron gates closed in front; building dimly lit; determine and replicate furnishings; add State historic marker; install panels at overlook discussing geological history of the Bluff and river valley and outline of human habitation history; recommends that Landmark Foundation put up historic marker and furnish the interior. Asked Milo to communicate with the Corps. (LFM)

April 13, 1979

Letter and short report from Ronald S. Taylor (Auburn University, Department of Geology) to Mary A. Neeley (Landmarks Foundation). Report "Geology of the Civil War Powder Magazine Site." (LFM)

April 16, 1979

Newspaper article titled Rangers keep tabs on safety (by Mary Reeves) from the *Montgomery Advertiser*. Quotes Ranger Chief James Sanders and Park Superintendent Wendall Jones. Attached note from Creswell states that these rangers from the City of Montgomery Parks and Recreation Division will patrol Powder

Magazine Site when complete and turned over to the city for operation. (USACE)

September 6, 1979 Area Engineer (USACE, Fort McClellan) to Basil Dishongh, Jr. (President, Columbus [MS] Building and Supply Company, General Contractors). Referenced in September 19 letter. (USACE)

September 12, 1979 Basil Dishongh, Jr. (President, Columbus [MS] Building and Supply Company, General Contractors) to Lt. Colonel Sowell (Contracting Officer). Referenced in September 19 letter. (USACE)

September 19, 1979 Basil Dishongh, Jr. (President, Columbus [MS] Building and Supply Company, General Contractors) to Area Engineer (USACE, Fort McClellan). Change in Powder Magazine brick finish, as per color photographs sent by USACE. Contractor to complete interior work first, before beginning outside work (waiting for Change Order). Dishongh says joints noted in photos do not match existing joints in Powder Magazine. Also, more than 5 percent of the bricks will have to be removed. Estimating cost for additional work to be more than \$25,000. Request Change Order describing proposed work and meeting to agree on additional scope. Contractor would then complete work before an accurate cost proposal (time and materials) is submitted. (USACE)

October 3, 1979 Letter from E.P. Beacham, Jr. (USACE, Chief, Safety Office) to Holman Iron Works (Montgomery). Contract for construction of Tubular Steel Fencing at the Powder Magazine Access Area awarded to Holman on September 28, 1979. Letter informs Holman of safety responsibilities, including development of a written safety plan, meeting with Contracting Officer prior to beginning work. (USACE)

October 16, 1979 Letter from James L. Loeb (President, Landmarks Foundation of Montgomery, Inc.) to General George Bibb Pickett (National Rifle Association, Montgomery). Requesting his help in determining furnishings and possibly sponsoring exhibits in the Powder Magazine. (LFM)

October 20, 1979 Exhibit B of contract between Alabama Power Company and the U.S. Army Corps of Engineers authorizing electric service to

Powder Magazine Public Use Facility. Effective November 1, 1979. (USACE)

- October 24, 1979 Letter from General George Bibb Pickett (National Rifle Association) to James L. Loeb (President, Landmarks Foundation of Montgomery, Inc.). Pickett interested in project. Offered personal help, discuss with NRA staff in Washington. (LFM)
- November 26, 1979 Letter from James L. Loeb (President, Landmarks Foundation of Montgomery, Inc.) to Mayor Emory Folmar (City of Atlanta). Announcing interest of General George Bibb Pickett in leading committee for exhibits at Powder Magazine, focusing on Civil War artifacts. Mrs. Aubrey Neeley to work with Pickett on descriptive plaques at overlook. (LFM)
- June 11, 1980 Memo from Creswell regarding Powder Magazine Site. Creswell called James E. Brown, Director of the Montgomery Parks and Recreation Department regarding takeover of park by city. Brown indicated that the iron gate to the upper area, toilets, overlook, and powder magazine would be locked at night. Parks department was going to install a gate on the loop road to the picnic area and boat ramp. Creswell advised that locking boat ramp gates had not been successful for Corps due to unforeseen situations when boaters would return late and were unable to reach their trailers. Parks department had worked out system that they thought would work. (USACE)
- July 1, 1980 Lease between the Secretary of the Army and the City of Montgomery for 62.38 acres (tracts 916, 937, 938, and 939) in the R.E. "Bob" Woodruff Project Area for public park and recreation purposes. Includes 1"=500' map showing tracts, and legal description of property. (USACE)
- July 3, 1980 Letter from Melvin W. Dovith (USACE, Chief, Real Estate Division) to Mayor of Montgomery submitting lease for Powder Magazine Park. Scheduling of inventory and condition report. (USACE)
- July 4, 1980 Memo from Creswell regarding drowning of Dozier Sellers on July 4, about 40 feet from the boat ramp. (USACE)
- July 7, 1980 Memo from Creswell regarding July 6 *Montgomery Advertiser* article by Kathy Hyde on Powder Magazine Site (article not

found). Boat ramp was open on the July 4th weekend, although unfinished. Contractor has been allowing public to use the ramp. James Brown, Parks Director, had intended to close boat ramp at sundown, but Corps policy states that boat ramps are to be left open at all times. Gate at entrance to ramp-picnic areas has been removed. (USACE)

- July 16, 1980 Letter from Robert Creswell (USACE, Resource Manager) to Rodney Henderson (Montgomery). Corps ranger identified Henderson from dumped household litter. Threatens citation for littering on Government property if trash not removed. (USACE)
- July 17, 1980 Letter from Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) to Melvin W. Dovith (USACE, Real Estate Division) noting receipt of lease agreement for Powder Magazine Park area and requesting clarifications. Will Corps dredge boat harbor on an as-needed basis? Will Powder Magazine Park area be completed according to the plans and specifications originally submitted? (USACE)
- July 29, 1980 Response from Melvin W. Dovith (USACE, Real Estate Division) to Mayor Emory Folmar to letter above. Dovith cited March 30 1976 letter from former mayor Jim Robinson that stated that all park operations, including dredging, would be performed by the City. Dovith also stated that facilities and improvements (except for landscaping) had been completed, and that a security fence had been erected as requested by the city. (USACE)
- August 11, 1980 Letter from Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) to Melvin W. Dovith (USACE, Real Estate Division) citing earlier letters and indicating that dredging the boat harbor was "beyond the capability and scope of services offered by the City." McKinney also noted uncorrected deficiencies in the park, noted during a joint inspection in early July. These included (Dovith has written notes by each item, here in parentheses: repair of a drop inlet at the entrance on Eugene Street (fixed); standing water in the radius at the parking lot entrance (fixed); repainting of overlook (contract); lower level parking lot needs striping (Jerry); repair/replace water fountains on wall of upper level restrooms (fixed); repair section of security fence (fixed). (USACE)
- August 14, 1980 Disposition Form from Dovith (USACE, Chief, Real Estate Division) requesting comments on letters from the City of

Montgomery (see above). Smith (Chief, Civil Management Section, Construction Division) responded on August 19 requesting Dovith contact the city and resolve deficiencies or recommend corrections. (USACE)

- September 12, 1980 Invoice from a.r.c. associates, inc., (park and recreation planners, Glenview, Illinois) through James F. Banton to Jimmy Loeb (Landmarks Foundation of Montgomery, Inc.) for travel expenses. (LFM)
- December 4, 1980 Letter from Melvin W. Dovith (USACE, Real Estate Division) to Mayor Emory Folmar regarding boat basin dredging and construction deficiencies. Dovith noted that deficiencies had been corrected and that landscaping was nearly complete. Dovith offered to dredge the boat basin at three to five year intervals, rather than on-demand of city. City should be responsible for dredging required at other times. Cited Mayor Robinson's recognition of city's responsibilities in this matter. Requests signatures on lease agreement. (USACE)
- undated Newspaper article "Powder Magazine Park remains padlocked." After development. Powder Magazine restored and 52-acre park developed by the U.S. Army Corps of Engineers. Corps delayed drawing up lease, had not turned park over to City. William Matkins (USACE, Mobile) mailed temporary right of entry lease to City. Final lease from Washington to follow in 90 days. [Some project history]. Interest in preserving magazine began in 1957. Unnamed preservation group adopted the project, then failed. Magazine forgotten until 1974. City wanted to develop the site into a park. City attorneys determined that the State had deeded the magazine, but not the land, to Montgomery. Privately-owned fifteen acre tract condemned when owner refused offer of \$35,000. Property revalued at \$67,000 by probate court. Owners held out for more, claiming that they had offer to build a marina. Owners settled for \$37,000. In 1975, the City Commission purchased additional two tracts for \$30,000. Corps project originally budgeted for \$400,000 (six years ago). Already spent \$936,000. "Until Mayor Emory Folmar and the City Council agree to the terms of the lease, the park will remain locked for lack of sufficient park rangers to patrol it" (Corps).

Concerns about vandalism, flood damage. "Grand opening dates have unceremoniously come and gone several times since 1977, often to allow flood damage to be corrected." (LFM)

- February 5, 1981 Letter from Robert M. Creswell (USACE, Resource Manager) to Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) submitting joint inspection forms (see below, February 4) for approval and signatures. (USACE)
- February 4, 1981 Joint Survey and Inspection of Condition of Government Leased Property, signed by James E. Brown (Parks Department, Montgomery) and Robert M. Creswell (USACE). Gives square footage of all buildings, including powder magazine (1031 sq. ft.). Nearly all conditions acceptable. Landscaping to be completed by March 31, 1981. Lift station pumps to be installed by February 18. Regular dredging of channel to boat ramp scheduled. (USACE)
- February 23, 1981 Letter from Robert M. Creswell (USACE, Resource Manager) to Emory Folmar (Mayor of Montgomery) noting addendum to Public Notice (dated February 12, 1981) for dredging the channel of the boat launching ramp at five year intervals. (USACE)
- April 9, 1981 Disposition Form from Creswell (USACE, Resource Manager). Creswell notes that Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) was contacted on April 8. McKinney stated that the lease had been submitted to the mayor for his signature, but had not been signed. McKinney also stated that he would submit the lease to the city council "within the next few weeks." (USACE)
- May 28, 1981 Letter from Robert M. Creswell (USACE, Resource Manager) to Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) requesting return of signed Joint Survey and Inspection of Conditions of Leased Property forms (sent to McKinney on February 4). (USACE)
- May 29, 1981 Letter from Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) to H.C. Weiss (USACE, Acting Chief, Real Estate Division) advising that city action on the lease agreement would be completed by the third week in June and that the signed Joint Survey and Inspection of Conditions of Leased Property forms would be returned to Robert M. Creswell (USACE, Resource Manager) "within the same time frame." (USACE)

June 23, 1981 Letter from Jack W. Chambliss, P.E. (Traffic and Electrical Engineer, City of Montgomery) to Robert M. Creswell (USACE, Resource Manager) confirming telephone call regarding manufacture of signs for Powder Magazine Park. (USACE)

June 25, 1981 Letter from Robert M. Creswell (USACE, Resource Manager) to Jack W. Chambliss, P.E. (Traffic and Electrical Engineer, City of Montgomery). Creswell requisitioned signs from Mobile District sign shop and hoped to have them available for Bassmaster's Classic in October. (USACE)

August 10, 1981 Letter from Reese McKinney, Jr. (Administrative Assistant to the Mayor of Montgomery) to Robert M. Creswell (USACE, Resource Manager) stating that the city would provide annual certification of potable water quality compliance with Alabama Department of Health standards. (USACE)

August 20, 1981 Letter from Joseph E. Downey (Director, Division of Public Water Supplies, Alabama Environmental Health Administration) to Robert M. Creswell (USACE, Resource Manager) stating source and quality of Powder Magazine Point Park water. (USACE)

August 28, 1981 Letter from Robert M. Creswell (USACE, Resource Manager) to Jack W. Chambliss, P.E. (Traffic and Electrical Engineer, City of Montgomery). Signs for Powder Magazine Park completed and will be delivered to Montgomery soon. Notes use of boat ramp and Riverside Housing Project resident's appreciation of park. Shows appreciation to Montgomery Park Rangers and Police for preventing vandalism and littering. (USACE)

August 31, 1981 Letter from Jack W. Chambliss, P.E. (Traffic and Electrical Engineer, City of Montgomery) to Robert M. Creswell (USACE, Resource Manager) response to letter above, providing shipping address for Powder Magazine Park signs. (USACE)

September 15, 1981 Letter from Robert M. Creswell (USACE, Resource Manager) to Reese McKinney (Administrative Assistant to the Mayor of Montgomery) referencing McKinney's letter of August 7, and noting that state agency does not require annual certification on sewage treatment systems. Corps will require "annual evidence of a satisfactory potable water surveillance program revealing regular testing is being performed to insure prescribed health standards are being met." (USACE)

July 22, 1982	Letter from Robert M. Creswell (USACE, Resource Manager) to James E. Brown (Director, Parks Department, City of Montgomery) regarding periodic inspection of leased sites on the Alabama River Lakes project. Recent inspection by Sam Golson (Assistant Resource Manager for Woodruff Lake) and Ranger Persio noted deficiencies and eight priorities for correction on attached form [form not found]. Recommended correction of noted deficiencies by September 15. Also recommended including building repainting in future budget(s), asked for suggestions on loss of rail fence section lost to high water. Noted that the Bassmaster Classic would begin at the Powder Magazine boat ramp. (USACE)
July 28, 1982	Letter from James E. Brown (Director, Parks Department, City of Montgomery) to Robert M. Creswell (USACE, Resource Manager) responding to letter above. Responding to reported deficiencies. Twelve domed trash receptacles have been stolen; to be replaced with 55 gallon drums. No way to correct problem with eroding trail section. Suggest barricading section with two rail fence and erect danger signs. Deficiencies will be corrected by September 15 deadline. (USACE)
January 3, 1983	Letter from James E. Brown (Director, Parks Department, City of Montgomery) to Robert M. Creswell (USACE, Resource Manager). Portable restroom unit for Powder Magazine Park stored at the Parks and Recreation Maintenance Office, Lake Street. Unit only used for special events, due to problems with vandalism. (USACE)
March 17, 1983	Letter from William R. Matkin (Chief, Management and Disposal Branch, Real Estate Division, USACE) to James E. Brown (Director, Parks Department, City of Montgomery) regarding letter above. States that general storage and special events use is acceptable. (USACE)
March 22, 1983	Letter from Robert M. Creswell (USACE, Resource Manager) to Reese McKinney (Administrative Assistant to the Mayor of Montgomery) requesting evidence of a satisfactory potable water surveillance program at Powder Magazine Park and testing during 1982. (USACE)
May 3, 1983	Memo from Robert M. Creswell (Resource Manager, USACE) recommending that the Corps convey road sections to the City of

Montgomery. These sections provide access to dwellings and to the park and boat ramp. References enclosed plan [not attached] showing road sections to be conveyed. City should maintain the integrity of View Street because it connects Eugene and Gordon Streets. (USACE)

June 1, 1983

Memo from William L. Lawrence (Assistant Chief, Management & Disposal Branch, USACE) recommending disposal of Government land "lying south and west of Eugene Street and south of View Street if Eugene and View Streets are disposed of." Requests names and addresses of owners of adjacent landowners (suspects part or all of the adjacent land is owned by the Housing Board of the City of Montgomery). Response from Robert M. Creswell (Resource Manager, USACE) dated June 10, results of tax record search indicate "that the property on which the Riverside Heights Housing Project is located is owned by the United States Government [maps included]. The brick apartments appear to be well back from the property line dividing housing project from Tract 938 (Housing Authority of the City of Montgomery)." Notes that 8 foot grassed strip and cyclone fences along View Street are on property lines of Lot 3 (148 Gordon St., owned by Callie and Rosa Ann Carter) and Lot 4 (149 Gordon St., owned by John M. and Margaret M. Smith). Lots are owner occupied. (USACE)

July 17, 1984

Letter from Robert M. Creswell (USACE, Resource Manager) to James E. Brown (Director, Parks Department, City of Montgomery) regarding January 3, 1983 letter (above). Rangers sometimes found permanent restrooms closed and also found them open but "in unsatisfactory condition from a sanitation standpoint." Creswell visited park, observed "restrooms in a deplorable state," and noted "that Powder Magazine, like several of the Corps' operated parks, is beset with vandalism problems and suffers from lack of respect by some of its users." Recommends having the restrooms serviced regularly, and including interior painting in City's budget. Congratulates Brown on maintaining condition of boat ramp area. (USACE)

July 26, 1984

Letter from William L. Lawrence (Assistant Chief, Management & Disposal Branch, USACE) to James E. Brown (Director, Parks Department, City of Montgomery) requesting reports on receipts and expenditures for fiscal year ending September 30, 1983, and an annual management plan covering October 1, 1984 through September 30, 1985. (USACE)

December 23, 1985 Letter from Samuel Golson (Resource Manager, USACE) to James E. Brown (Director, Parks Department, City of Montgomery) noting facilities in need of repairs, including missing men's lavatory, broken or missing screens, broken water fountain, dirty mirrors, chalk writing on sidewalks, rusted charcoal trays in picnic grills, graffiti on overlook structure, peeling paint on overlook structure and waterborne toilet, and litter behind overlook structure. Notes abuse of other Alabama River Lake parks, and calls attention to condition numbers 1 (protection from vandalism) and 9 (repairing and replacing damaged government property in City's lease. (USACE)

January 28, 1986 Memo from telephone conversation, Edward "Ike" Lyon (FO-AL, USACE) to Charles Barton (Real Estate, Management Section, USACE) reporting no progress in repairing deficiencies at Powder Magazine Park. For example, one month after report, waterborne toilet was locked up and had not been repaired. Barton "felt it was time for Real Estate office to become involved," and said they would write a letter to the City and report back to Corps. (USACE)

February 12, 1986 Letter from William R. Matkin (Chief, Management and Disposal Branch, Real Estate Division, USACE) to James E. Brown (Director, Parks Department, City of Montgomery) referencing December 23, 1985 letter and inspection made of Powder Magazine Park on January 29, 1986. No progress made on repairing or replacing damaged property. Requests comments on proposed corrective actions and schedule for corrections as soon as possible. (USACE)

September 5, 1986 Engineering and Design Regulation: Clearance for Power and Communication Lines over Reservoirs, written by Colonel Arthur E. Williams, USACE Chief of Staff. Highlighted sections include underground installation of primary and secondary distribution lines, minimum vertical clearances for power lines over rigging and launching areas, minimum vertical clearance over public lands not susceptible to inundation. (USACE)

March 30, 1987 Cover sheet for Real Estate Inspection Report [not attached] submitted by Donald L. Burchett (Chief, Real Estate Division). (USACE)

April 14, 1987 Letter from William R. Matkin (Chief, Management & Disposal Branch, Real Estate Division, USACE) to James E. Brown

(Director, Parks Department, City of Montgomery) listing deficiencies noted during March 19, 1987 inspection. These included: loose outside railings on overlook; raised nails on wooden walkway; damage to ceiling in waterborne toilet from access to attic of building; loose boards on exterior of waterborne toilet; missing towel and tissue holders in waterborne toilets; and waterborne toilet and overlook need painting. Otherwise, park looks good. (USACE)

May 22, 1989

Memo from Hugh McClellan (Chief, Environment and Resources Branch, USACE, Mobile) to Ernie Seckinger (PD-ER, USACE, Mobile) requesting architectural inspection of Powder Magazine and a report suggesting remedies. Photos enclosed (taken December 1988) show deterioration since completion of restoration. Report to be submitted to PD-ER. Remedial measures to be coordinated with Alabama SHPO. (USACE)

August 1, 1989

Field inspection notes by Ernie Seckinger (PD-ER, USACE, Mobile). Attending field visit were: Bill Thomas, ____ Carruthers, ____ Velasquez, Ike Lyon, and Ernie Seckinger. Lock cut and replaced with city lock. Lights inoperative, termite tunnels from ceiling, vent holes filled with red coarse sand, drip marks in debris at north wall base, north side of roof sagging, roof felt exposed at roof edge, portland cement used as slate roof sealant. MacDonald Brooms and Elizabeth Brown (AHC) recommend removing hackberry, adding course of slate at eaves. (USACE)

August 8, 1989

Memo from Billy R. Thomas Sr. (EN-DA) regarding architectural inspection of the Powder Magazine (with Ernie Seckinger, PD-ER) to investigate reported deterioration. Included observations of dampness and mortar deterioration on lower half of exterior walls, algae growth on brick cornice, minimal efflorescence on columns and walls, gaps in slate allowing water to enter wall cavity, sagging north slope of roof (termites, water), wall cavity filling with spalled brick, interior spalling of brick and mortar, termite infestation. Suggested stabilization: remove roof (slates, clay tile ridge, hip members) and repair deck; add copper eave flashing, new felt; remove material from cavity space and vent holes to restore wall ventilation; treat for termites. Suggested restoration: reframe roof with heart pine; remove existing mortar to 1" deep and tuck point with new mortar. Photographs included. Cost estimates provided. (USACE)

August 11, 1989	Memo from Hugh McClellan (Chief, Environment and Resources Branch, USACE, Mobile) to Ernie Seckinger (PD-ER, USACE, Mobile) regarding necessity for repairs or restoration of Powder Magazine. Included architectural report. Request determination of responsibility for funding work. (USACE)
August 11, 1989	Memo from Michael E. Miller (Chief, Natural Resources Management Branch) requesting that Jim Stanfield (Resource Manager) "investigate the reported structural deterioration of the powder magazine, Powder Magazine Park and recommend course of action. (USACE)
August 23, 1989	Memo from William R. Matkin (Chief, Management & Disposal Branch, Real Estate Division, USACE) to OP-R stating that "repairs required to maintain the Powder Magazine are the responsibility of the City of Montgomery" under the current lease. However, the Corps will use O & M funds to perform repairs where damage "is a result of inferior materials used or workmanship performed during the Corps's restoration." (USACE)
undated	Scope of Work for Roof Repair-Historic Powder Magazine Building, Powder Magazine Park, R.E. "Bob" Woodruff Lake. Scope requires removal of existing tile and slate and existing wood structure. Framing and decking was to be replaced using treated 2x8s and ½ inch CDX plywood. New copper flashing, new 30# felt was to be installed and slate and ridge tiles were to be replace using copper nails. Scope includes suggested contractor (Standard Roofing of Montgomery) and other potential bidders (Montgomery Roofing Company, Alabama Roofing and Sheet Metal). (USACE)
December 11, 1989	Proposal from Montgomery Roofing Co., Inc. to repair roof of Powder Magazine. Proposed \$12,350 to complete Scope of Work. (USACE)
January 22, 1990	Proposal from Standard Roofing of Montgomery, Inc. to repair roof of Powder Magazine. Proposed \$18,870 to complete Scope of Work. (USACE)
February 6, 1990	Memo from Ernie Seckinger (PD-ER, USACE, Mobile) regarding rehabilitation specifications for Powder Magazine, as discussed with Elizabeth Brown (Alabama Historical Commission). Specifications included: removing existing roof and support, replacing with treated lumber (2 by 8, ½ inch CDX plywood),

adding copper eaves, reinstalling slate with copper nails. Noted and approved bid of Standard Roofing of Montgomery to conduct work. (USACE)

May 18, 1990

Memo from Samuel R. Golson (Resource Manager) to Mr. McPherson (RE-MM, through OP-R) regarding March closing of two recreation areas (Powder Magazine Park and Little Miami Access Point) due to severe bank erosion. Recommended that a team visit these area to study management alternatives and develop an action plan.

"Powder Magazine Park, a day use area leased to the City of Montgomery, has suffered from erosion in the picnic area since construction of the park in 1980. Approximately 100 feet of earth for a distance of several hundred feet along the shore has fallen in the river over this time period. Four picnic tables, an asphalt trail, and a fence have been lost due to continuing erosion. Flowing Spring flooding of this year, the City of Montgomery Parks and Recreation Department barricaded off the picnic area for visitor's safety. The boat ramp and overlook areas remain open." (USACE)

May 29, 1990

Memo from Michael E. Miller (Chief, Natural Resources Management Branch) regarding memo above. Instructed to close or develop limited opening schedule of eroded public use areas. No plans to investigate/ evaluate further until funding can be identified. (USACE)

August 13, 1991

Letter from Charles E. Mauldin (Right-of-Way Agent, Corporate Real Estate, Alabama Power) to William R. Matkin (Chief, Management and Disposal Branch, Real Estate Division, USACE) requesting permission to install security lighting (on overhead electrical distribution line) at Powder Magazine Park for City of Montgomery. References Alabama Power drawing [not attached] (USACE)

September 16, 1991

Memo from William L. Lawrence (Assistant Chief, Management and Disposal Branch, Real Estate Division, USACE) to Dan McPherson (FO-AR, USACE) regarding Alabama Power's security lighting request. Request for review and comments. (USACE)

September 26, 1991

Memo from Samuel R. Golson (Resource Manager) to RE-MM (USACE) providing review of Alabama Power security lighting request. No objections to placing lights at boat ramp, above 100

year flood elevation (163.2 ft amsl). Preference for underground electrical installation for clearances and aesthetics. (USACE)

- October 7, 1991 Letter from Tommie E. Pierce, Jr. (Chief, Management and Disposal Branch, Real Estate Division, USACE) to James E. Brown (Director, Parks and Recreation Department, City of Montgomery) regarding inspection of Powder Magazine Park on January 8, 1991 and September 23, 1991. Deficiencies noted include: loose or missing safety railings on overlook pavilion; rotted boards on lower walkway; missing lighting fixtures; graffiti; broken fence allowing visitors access to water; litter; restrooms and pavilion require staining. FY92 Annual Management Plan and FY91 Report of Receipts and Expenditures should be submitted. Safety deficiencies should be corrected in 30 days. Noted request for installation of security lights. Agree that lights are needed; drawings awaiting review. (USACE)
- November 4, 1991 Letter from Tommie E. Pierce, Jr. (Chief, Management and Disposal Branch, Real Estate Division, USACE) to Charles E. Mauldin (Right-of-Way Agent, Corporate Real Estate, Alabama Power) reviewing request for installation of security lighting at Powder Magazine Park. Approved, with revisions. Installation to include underground distribution line, provisions for "de-energizing service lines prior to inundation" (responsibility of City). (USACE)
- December 11, 1991 Letter from Tommie E. Pierce, Jr. (Chief, Management and Disposal Branch, Real Estate Division, USACE) to Craig R. Struthers (Superintendent, Parks and Recreation Department, City of Montgomery) reviewing proposal to replace walkway railings to the pavilion at Powder Magazine Park. Railing should blend with current design. (USACE)
- March 14, 1992 Updated Historic Property Site File for 1MT33 (Powder Magazine), originally prepared March 17, 1990 by Ernie Seckinger. Reference to 1989 Mobile District archaeologist's note that the building is deteriorating (insect holes in brick, effervescence, excessive moss on north elevation, weak roof supports). Notes March 10, 1992 inspection indicating continued deterioration. Recommends qualified historic architect evaluate building' elements and develop a rehabilitation plan. Lease with City needs modification or strengthening. (USACE)

March 16, 1992	Memo from Ernie Seckinger and Jerry Nielson (PD-ER, USACE, Mobile) regarding inspection of Powder Magazine and other sites on R.E. "Bob" Woodruff Lake (aka Jones Bluff Lake) between March 9 and 13. On-site meeting attended by Ike Lyon (FO-AL), John Williams (FO-AL), Ned Jenkins (AHC), Jerry Nielson, and Ernie Seckinger. Problems noted include, slopping grouting of ridgecap tiles, poorly installed slate shims supporting brick dentils, fresh crack in NE corner wall, non-overlapping copper flashing, tunneling spiders, no lime in new (1978) exterior mortar, poorly supported door jamb, rusting threshold, rotting doors, screens over only two vent holes, no interpretive sign. Recommended analysis by professional architect and development of comprehensive plan for restoration and stabilization of building. OP-R and PD-ER will prioritize elements of plan to coincide with annual O&M budget. (USACE)
March 20, 1992	Memo from Samuel R. Golson (Resource Manager, USACE) to Ike Lyons (USACE) regarding deterioration of pavilion walkway noting recent inspection by park rangers and referencing December 1991 letter to (Parks and Recreation, City of Montgomery). Recommends "follow up letter strongly urg[ing] the lessee to make speedy repairs." (USACE)
June 30, 1992	Letter from Tommie E. Pierce, Jr. (Chief, Management and Disposal Branch, Real Estate Division, USACE) to Craig R. Struthers (Superintendent, Parks and Recreation Department, City of Montgomery) requesting that the City proceed with walkway repairs. (USACE)
March 11, 1993	Memo to Jim Stanfield (CESAM-OP-R, USACE). Subject: Historic Properties Management Plan, submitted to Bramlette (CESAM-OP-RE) and Smallwood (CESAM-OP-RE), requesting review and comment on this document, particularly regarding Powder Magazine. Notes Corps continuing legal obligation to "insure that the structure is maintained." PD-ER recommending architectural survey to determine rehabilitation needs. Requests information on State's responsibilities and Corps options. Stresses need for building rehabilitation. (USACE)
March 1993	Historic Properties Management Plan: R.E. "Bob" Woodruff Lake, Alabama River, Alabama. Prepared by Environmental Resources Planning Section, Planning and Environmental Division and Natural Resources Management Branch, U.S. Army Corps of

Engineers, Mobile District. (p.16) 1MT33 (Powder Magazine). Building restored by the Mobile Corps in 1977, under provisions of a no adverse effect determination by the District, the Alabama SHPO, NPS, and ACHP. Corps will comply with Mack (1975) and no sealant will be placed on exterior brickwork. Slate roof replaced in 1991. Grouting on new ridge cap tiles is sloppy. Slate shims missing from NE and NW corners below brick dentils. Crack in base of building's NE corner. Tunneling spiders. Lime leaching from exterior mortar (repointed in 1978). Rusting metal threshold. Wet and rotting wood doors. Missing screens over vent holes. No interpretive signs.

Recommended actions - monthly patrols, annual monitoring, prepare *restoration and maintenance plan*, restoration, resolution of caretaker responsibility, interpretation. (USACE)

May 5, 1997

Historic Property Inspection form for Powder Magazine (1MT33) completed by John Bennett. Building described as an 1840 Federal style brick powder magazine. Conditions noted include: rust; 1-3 cm of mortar dust in SW corner; termite tunnels from ceiling along the walls; severe corrosion of the iron tie-rods; moldy air; rising damp; bricks cracking due to overhard mortar/portland cement; brick surfaces eroded from powerwashing or sandblasting; possible bird's nest in vent holes; loose brick dentils. (USACE)

June 18, 1997

Letter from Curtis M. Flakes (Chief, Environment and Resources Branch, USACE) to F. Lawrence Oaks (Alabama State Historic Preservation Officer, Alabama Historic Commission) recommending transfer of the maintenance responsibilities for the Powder Magazine Access Area to the Alabama Historical Commission. (USACE)

January 25, 1999

E-mail from Ernie Seckinger (PD-ER, USACE, Mobile) to Bobby Southerlin (Brockington and Associates) transmitting August 1, 1989 field inspection notes. (USACE)

February 10, 1999

Field notes of Bobby Southerlin (Brockington and Associates, Inc.) from meeting at Powder Magazine. Attendees included: Ernie Seckinger, Ike Lyon, and John Bennett (USACE); Bobby Southerlin (Brockington and Associates, Inc.); Kim Harden, Ed Hooker, and Camile Bowman (Alabama Historical Commission); Durand Seay and Tim Vaught (Architecture by Acanthus). Discussion of various building preservation/stabilization efforts, primarily associated with ongoing moisture problems. Also

includes notes on subsequent discussions between Southerlin and Seay regarding project tasks. (B&A)

February 19, 1999

Cost estimate for stabilization of the Powder Magazine from Randy Seay (Architecture By Acanthus). (B&A)

April 16, 1999

Letter from Hugh McClellan (Chief, Environment and Resources Branch, USACE) to Elizabeth Brown (Acting Alabama SHPO, Alabama Historical Commission) describing scope of maintenance work at Powder Magazine. Reference to February 1999 onsite meeting. Work to include: correcting moisture problems; repointing brick; installing screens to control animal/bird access; repairing slate roof; and stabilizing interior iron beams and trusses. Letter approved by signature on June 8, 1999 (USACE)

**Appendix E. Report Review Letter from Alabama Historical
Commission**



ET-Enric

STATE OF ALABAMA
ALABAMA HISTORICAL COMMISSION
468 SOUTH PERRY STREET
MONTGOMERY, ALABAMA 36130-0900

LEE H. WARNER
EXECUTIVE DIRECTOR

TEL: 334-242-3184
FAX: 334-240-3477

February 10, 2000

Hugh A. McClellan
U.S. Army Corps of Engineers
Mobile District
P.O. Box 2288
Mobile, Alabama 36628

Re: Powder Magazine
Historic Documentation & Architectural Maintenance
City of Montgomery
Montgomery County, Alabama

Dear Mr. McClellan:

Upon review of the documentation provided by your office, the Alabama Historical Commission would like to thank you for the high quality and detail in the report you submitted. We would also like to take this opportunity to thank you for the excellent coordination during the efforts on this project. We continue to look forward to working with your office on all future Corps endeavors.

Sincerely,

Elizabeth Ann Brown
Deputy State Historic Preservation Officer

EAB/GCR